Volvo XC90

ENGINES
Туре
Configuration
Displacement, cm ³
Bore (mm)
Stroke (mm)
Engine cylinder block material
Cylinderhead material
Compression ratio
Valves, no/cylinder
Camshafts
Engine management system
Ignition sequence
Engine idling speed, rpm
Fuel, rec. octane
Max output, kW (hp)/rpm

Max torque, Nm/rpm

POWER AND TORQUE →

Manual gearbox/final drive Automatic gearbox/final drive

Acceleration, 0-100 km/h (sec)

Fuel consumption I/100 km (Combined)

PERFORMANCE

Top speed, km/h

Gearbox

T5 AWD (B4204T23)				
In-line 4-cyl. turbo				
Transverse, all wheel drive				
1969				
82.0				
93.2				
Aluminium				
Aluminium				
10.8:1				
4				
2				
Gasoline direct injection				
1 - 3 - 4 - 2				
850 ± 100				
95-98 RON				
187 (254)/5500				
350/1500-4800				
Power Torque				

	Torque [Nm]	Power [kW]							
	500	250							
	450	225							
	400	200							,
	350	175	/					/	
	300	150					\forall		
	250	125				/			
	200	100			_				
	150	75							
Power Torque	100	50							
	50	25							
3000 4000 5000 6000	7000	1000	201	00	30	00	40	00	
Engine speed [rpm]						En	gine [rp	spe m]	•
		_							

T6 AWD (B4204T27)

1969 82.0 93.2 Aluminium Aluminium 10.3:1 4 2

Transverse, all wheel drive

Gasoline direct injection

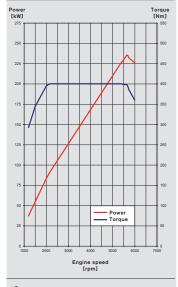
1 - 3 - 4 - 2 850 ± 100 95-98 RON 235 (320)/5700 400/2200-5400

In-line 4-cyl. supercharged and turbocharged

[rpm]					
-					
AW TG-81SC	3.329				
	Automatic				
	6.5				
	230				
	7.7				
	179				

T8 AWD (B4204T35)
In-line 4-cyl. supercharged and turbocharged
Transverse, front wheel drive, rear electric motor
1969
82.0
93.2
Aluminium
Aluminium
10.3:1
4
2
Gasoline direct injection
1 - 3 - 4 - 2
850 ± 100
95-98 RON
235 (320)/5700
400/2200-5400

Torque [Nm]



Automatic
5.6
230
2.1
49

3.200

AW TG-81SD

Battery type

CO₂ g/km

Battery content, total amount of energy (kwh)

Battery charging time*, at 16A/10A/6A fuse (hours)

Range (Km) (NEDC for hybrids)

Electrical motor max power (kW/rps)

Electrical motor max torque (Nm/rps)

Driveline max power (hp)

Driveline max power (kW)

Driveline max torque (Nm)

Battery placement

•		-	
AW TG-81SC	3.329	AW TG-81SC	3.32
	Automatic		Au
	8.2		6.5
	215		23
	7.5		7.7
	174		17

Lithium-ion battery
9.2
2.5/3.5/6.0
>43 km**
65/117
240/0-50
~407 (320+87)
~300 (235***+65)
~640 (400***+240)
Controlled to the demand of the con-

Centrally in the tunnel of the car

Time pending on e.g. ambient temp
Pure electical range according to NEDC cycle range
In "Hybrid"-, Power"- and "EL-AWD"-mode

Feb 2016

Volvo XC90

ENGINES

Туре

Configuration

Displacement, cm³

Bore (mm)

Stroke (mm)

Engine cylinder block material

Cylinderhead material

Compression ratio

Valves, no/cylinder

Camshafts

Engine management system

Ignition sequence

Engine idling speed, rpm

Fuel, rec. octane

Max output, kW (hp)/rpm

Max torque, Nm/rpm

D4 (D4204T14)

In-line 4-cyl. twin turbo diesel

Transverse, front wheel drive

82.0

93.2 Aluminium

Aluminium

15.8:1

4

2

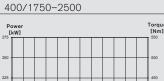
i-Art common rail direct injection

1 - 3 - 4 - 2

 825 ± 150

Cetane Number: Min 48*

140 (190)/4250



D4 AWD (D4204T6)

In-line 4-cyl. twin turbo diesel

Transverse, all wheel drive

1969

82.0

93.2

Aluminium

Aluminium 15.8:1

4

2

i-Art common rail direct injection

1 - 3 - 4 - 2

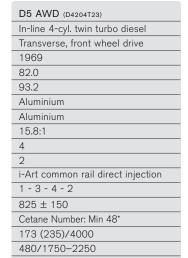
 825 ± 150

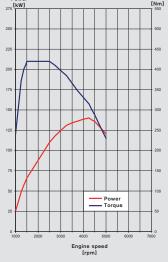
Cetane Number: Min 48*

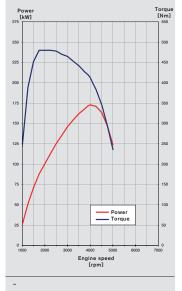
140 (190)/4250

420/1500-2500









Manual gearbox/final drive
Automatic gearbox/final drive

POWER AND TORQUE →

PERFORMANCE

Gearbox

Acceleration, 0-100 km/h (sec)

Top speed, km/h

Fuel consumption I/100 km (Combined)

CO₂ g/km

-	
AW TG-81SC	3.200
	Automatic
	9.2
	205
	5.2
	136

* Maximum biodiesel (RME) content 7%

AW TG-81SC	3.075	
	Automatic	
	9.4	
	200	
	5.7	
	149	
* Maximum biodiesel (RMF) content 7%		

AW TG-81SC	3.075
	Automatic
	7.8
	220
	5.7
	149
* Maximum biodiesel (RME) cont	tent 7%

TRANSMISSIONS

6-speed manual gearbox 8-speed automatic gearbox

RATIO	AW TG-81SC	AW TG-81SD
First	5.250	5.250
Second	3.029	3.029
Third	1.950	1.950
Fourth	1.457	1.457
Fifth	1.221	1.221
Sixth	1.000	1.000
Seventh	0.809	0.809
Eighth	0.673	0.673
Reverse	4.015	4.015

MEASUREMENTS AND VOLUMES

EXTERIOR MEASUREMENTS (CM)		
Length	495.0	
Width (incl mirrors outer edge)	214.0	
Width (incl mirrors folded)	200.8	
Height	177.6	
Wheelbase	298.4	
Overhang (front/rear)	88.7/107.9	
Track, front, (tire (width): 235/275)	166.5/167.3	
Track, front, with air suspension (tire (width): 235/275)	166.8/167.6	
Track, rear, (tire (width): 235/275)	166.7/167.5	
Track, rear, with air suspension (tire (width): 235/275)	167.1/167.9	
Ground clearance (standard chassis/with air suspension)	23.8/22.7-26.7	

WEIGHTS/MISCELLANEOUS

Weight, kg (running order, min-max, depending on setup)	2050-2319
Fuel tank, I (all/B4204T35)	71/50
Max. trailer weight, kg	1800-2700**
Max roof load, kg	100
Drag coefficient, Cd	0.29

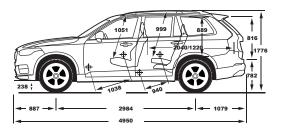
^{**} Depending on setup

INTERIOR MEASUREMENTS (CM)

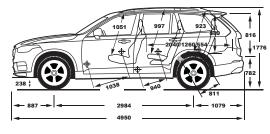
Headroom without panorama roof (front/rear) (5 seat)	99.8/99.9
Headroom without panorama roof (front/rear/third row) (7 seat)	99.8/99.7/92.3
Headroom with panorama roof (front/rear) (5 seat)	98.7/97.9
Headroom with panorama roof (front/rear/third row) (7 seat)	98.7/97.9/92.3
Headroom maximum, without panorama roof (front) (5 & 7 seat) 105.1
Headroom maximum, with panorama roof (front) (5 & 7 seat)	103.3
Passenger comp width at shoulder height (front/rear) (5 seat)	146.5/143.5
Passenger comp width at shoulder height (front/rear/third row) (7 seat	146.5/143.5/119.2
Leg room (front/rear) (5 seat)	103.8/94.0
Leg room (front/rear/third row) (7 seat)	103.8/94.0/81.1
Cargo volume, including under floor storage	
(ISO V214-1)(litres)(5 seat/7 seat/7 seat T8*)	1886/1868/1816
Cargo length from the first seatback to the tailgate measure	ed at:
- the height of the floor covering	204.0
Cargo length from the second seatback to the tailgate mea-	sured at:
- the height of the floor covering (5/7 seat)	122.0/126.0
Cargo height (rear wheel center and car center line)	88.9
Rear opening height (car center line)	81.6
Width of luggage compartment between wheelhouses	113.0
-	

 $^{{}^{\}star}\mathrm{T8}$ Twin engine is only avalable as 7 seat version.

5 SEAT

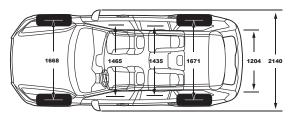


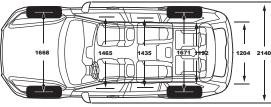
7 SEAT

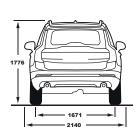


5 & 7 SEAT









Suspension	front	Double Wishbone Suspension, Coil Springs, Hydraulic Shock Absorbers, Stabilizer Bar. Optional Air Suspension	
	rear	Integral Axle with Transverse Composite Leaf Spring, Hydraulic Shock Absorbers, Stabilizer Bar. Optional Air Suspension	
Steering		Electric Power Assisted Rack and Pinion Steering	
Turning circle, (curb to curb)		11.8 m/12.1 m (tire 235/275)	
Braking system		Antilock Braking System (ABS) with Electronic Brake Distribution (EBD)	
		and Electronic Brake Assistance (EBA)	
Braking distance, 100-0 km/h		36 m	
Brake disc diameter	front	345 mm/366 mm (all/B4204T35)	
	rear	320 mm/340 mm (all/B4204T35)	