

2007 Audi A8 L W12 quattro
 Technical Specifications

Technical Specifications		2007 Audi A8 L W12 quattro		
ENGINE:				
Type	DOHC aluminum alloy 15° V-angle and 72° bank angle W12			
Arrangement	Front mounted, longitudinal			
Bore	3.31 in.	84 mm		
Stroke	3.55 in.	90.2 mm		
Displacement	366 cu. in.	5998 cc		
Compression ratio	11.0 : 1			
Fuel requirement	Premium unleaded 91 AKI / 95 RON recommended for maximum performance			
Horsepower (SAE)	450 hp	@ 6,200	rpm	
Torque	428 lb.-ft.	@ 4,000 - 4,700	rpm	
ENGINE DESIGN:				
Cylinder block	Aluminum silicon alloy (Alusil)			
Crankshaft	Forged, heat-treated steel, 7 bearings, weighing 21.2 kilograms. Crankpins are offset to achieve a constant firing order as on a V6 engine.			
Cylinder head	Aluminum alloy			
Valve train / intake	DOHC, double overhead camshafts driven by a single chain, low-friction roller cam followers, 2 inlet & 2 exhaust valves per cylinder. Infinitely variable timing control for camshafts (52° at inlet and 22° at exhaust valves)			
Firing order	1 - 12 - 5 - 8 - 3 - 10 - 6 - 7 - 2 - 11 - 4 - 9			
Cooling system	Water-cooled, thermostatically controlled radiator fan. Water pump in cylinder block/crankcase, map-controlled electronically controlled continued coolant circulation pump, coolant thermostat, hydraulic fan and electric fan, coolant circulation, and wooter cooled alternator.			
Lubrication system	gear pump, pressure lubrication, full flow through oil cooler			
Fuel injection / Ignition system	Fully electronic engine management utilizing Bosch Motronic® ME7.1.1., sequential injection with electronic throttle control, hot-film air-mass sensing, cylinder selective knock control via 4 sensors and permanent lambda control.			
Emission system	Air gap insulated exhaust manifolds, 4 close-coupled 3-way ceramic catalytic converters, 8 oxygen sensors.			
ELECTRICAL SYSTEM:				
Battery	12 volts	110 amp/hr		
Alternator	14 volts	190 amp		
DRIVETRAIN:				
Transmissions	6-speed Tiptronic transmission			
Type	quattro all-wheel drive			
	6-speed Tiptronic transmission			
Gear ratios:	1st	4.171:1		
	2nd	2.340:1		
	3rd	1.521:1		
	4th	1.143:1		
	5th	0.867:1		
	6th	0.691:1		
	Final Drive	3.317:1		
	Reverse	3.403:1		
Front Differential	Hypoid gear, electronically locking (EDL)			
Center Differential	TORSEN® (TORque SENSing) differential providing automatic and variable front to rear power proportioning			
Rear Differential	Hypoid gear, electronically locking (EDL)			
STEERING:				
Type	Maintenance-free rack-and-pinion steering with Servotronic variable speed-based power assist			
Turns (lock-to-lock)	2.8			
Turning circle (curb-to-curb)	41.7 ft.	12.7 m		
SUSPENSION:				
Fully Pneumatic	Air Suspension Struts at all four wheels.			
	Air Strut damping characteristics are continuously adjusted via sensors.			
	Four driver-activated suspension settings (Dynamic, Standard, Lift, and Automatic)			
BRAKES:				
Service brake	Dual circuit brake system with diagonal split, Anti-lock Brake System (ABS), Electronic Brake Distribution (EBD) and Electronic Stabilization Program (ESP); tandem brake booster			
Front, size and type	15.2 in.	385x36 mm	- Ventilated disc, 2 piston calipers	
Rear, size and type	13.2 in.	335x22 mm	- Ventilated disc, 1 piston caliper	
Parking brake	Electro-mechanically actuated at the rear wheels			
WHEELS:				
	Wheel & Tire Program			
	Standard 19" (C7G)	Optional 20" (CT1)	No cost 18" (CG3)	
Size	8.5J x 19	9J x 20	8.5J x 18	
Offset	45 mm		45 mm	
Weight	11,100 g / 24.5 lbs		12,800 g / 28.2 lbs	
Type	Forged alloy	Forged alloy	Cast alloy	
TIRES:				
	Standard 19" (HT2) a/s	Optional 20" (H9N) Perf. ¹	No cost 18" (HG7) a/s	
Size	255 / 40	275 / 35	255 / 45	
Speed rating	V	Y	H	
Construction	Radial	Radial	Radial	
Load Index	100	102	99	
Brand / Type (all approved)	Pirelli P6 Four Season	Pirelli P Zero Rosso	Pirelli P6 Four Seasons	
		Dunlop Sportmaxx	Conti TouringContact Ch 95	
		Conti Sport Contact 2		

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BODY:					
Material	Audi Space Frame construction (aluminum alloy) with aluminum alloy body panels				
Corrosion protection	Multi-step anti-corrosion protection				
CAPACITIES:					
Engine oil incl. Filter	13 qt.	12.5 liter			
Fuel tank	23.8 gal.	90 liter			
Cooling system	19.972 qt.	18.9 liter			
EXTERIOR DIMENSIONS:					
Wheelbase	121.0 in.	3074 mm			
Track:	front	63.7 in.	1619 mm		
	rear	63.2 in.	1605 mm		
Overall length		204.4 in.	5192 mm		
Overall width		74.6 in.	1894 mm		
Overall width with mirrors		79.8 in.	2028 mm		
Height (unloaded)		57.3 in.	1455 mm		
Ground clearance (loaded)		4.72 in.	120 mm	*** Ground clearance is dependent on Suspension Mode setting	
(variance)		+/- 1 in.	+/- 25 mm	*** Ground clearance and height is dependent on Suspension Mode setting	
Curb weight		4729 lbs.	2145 kg		
Drag coefficient	Cw =	0.27		Frontal Area =	2.31 sq. m.
INTERIOR DIMENSIONS (SAE measurements):					
Seating Capacity	4 or 5				
EPA class	Large				
Head room	front	37.4 in.	951 mm	(with sunroof)	
	rear	38.3 in.	974 mm		
Shoulder room	front	59.1 in.	1500 mm		
	rear	57.5 in.	1461 mm		
Leg room	front	41.3 in.	1049 mm		
	rear	42.3 in.	1075 mm		
Interior volume	front	52.8 cu. ft.	1496.7 liters		
	rear	54.0 cu. ft.	1529.9 liters		
	total	121.4 cu. ft.	3439.5 liters		
Luggage Volume (SAE)		14.6 cu. ft.	412.9 liters		
PERFORMANCE:					
0-50 mph (0-80kmh)	3.9 sec.				
0-60 mph (0-100 km/h)	5.0 sec.				
Top speed	Top speed is electronically limited at 130 MPH (209 km/h)				
FUEL ECONOMY (EPA estimate):					
City	15 mpg				
Highway	21 mpg 2006 data				
Combined	17 mpg				
FUEL ECONOMY: Canadian Estimate					
City	16.0 liters/100km 2006 data				
Highway	10.5 liters/100km				

¹ Performance tires are designed for optimum performance and handling in warm climates. They are not suitable for cold, snowy, or icy weather conditions. If you drive under those circumstances, you should equip your vehicle with four all-season or winter tires, which offer better traction under those conditions. We suggest you use the recommended winter or all-season tires specified for your car, or their equivalent. These high-performance tires also have a lower aspect ratio that aids performance and handling; however, in order to avoid tire, rim or vehicle damage, it is important that the inflation pressure is regularly checked and maintained at recommended levels. Serious wheel and tire damage may occur if the vehicle is operated on rough or damaged road surfaces or upon encountering road debris or obstacles. Please also remember in making your selection that, while these tires deliver responsive handling, they may ride less comfortably and make more noise than other choices. Finally, these tires may wear more quickly than other choices. For more information on all of these topics, please consult the owner's manual, your local dealer, or call 1-800-FOR-AUDI.