



Audi of America
 S8 Technical Specifications
 2008 Model Year



Technical Specifications		2008 Audi S8	
ENGINE:			
Type	Aluminum ten cylinder V90 degrees spark-ignition FSI gasoline direct injection, magnesium two stage variable intake manifold with integrated charge movement flaps, regulated high pressure and low pressure fuel system		
Arrangement	Front mounted, longitudinal		
Bore	3.33 in.	84.5 mm	
Stroke	3.65 in.	92.8 mm	
Displacement	318 cu. in.	5204 cc	
Compression ratio	12.5:1		
Fuel requirement	Premium unleaded 91 AKI / 95 RON recommended for maximum performance		
Horsepower (SAE)	450 hp	@ 7000 rpm	
Max. Torque	398 lbs. ft.	@ 3500 rpm	
ENGINE DESIGN:			
Cylinder block	Aluminium alloy		
Cylinder head	Aluminium alloy		
Valve train / intake	DOHC cylinder head, roller cam followers with hydraulic valve-plau compensation, continuous camshaft adjustment for the intake and exhaust valves, maintenance-free timing chain, 4 valves per cylinder		
Engine management/ mixture preparation	Fully electronic engine management, single-rod ignition coils, 2 control units as 'master-slave' concept, drive-by-wire throttle control, sequential gasoline direct injection, cylinder-selective lambda control, adaptive knock control, mapped ignition with solid-state high-voltage distribution, comfort and quick-start system / secondary air syatem, Bosch ME9		
Ignition system	Solid-state high-voltage distribution, comfort and quick-start system / secondary air syatem, Bosch ME9		
Exhaust emission system	Single-pipe manifold with 4 integrated main catalytic converters near to engine, each with pre-catalyst & post-catalyst probe		
ELECTRICAL SYSTEM:			
Battery	12 volts	110 amp/hr	
Alternator	14 volts	190 amp	
DRIVETRAIN:			
Transmission	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	4.055:1	
	Reverse	3.403:1	
Front Differential	Hypoid gear, electronically locking (EDL)		
Center Differential	Torque sensing differential providing automatic and variable front to rear power proportioning		
Rear Differential	Hypoid gear, electronically locking (EDL)		



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Technical Specifications (cont'd) 2008 Audi S8			
STEERING:			
Type	Maintenance-free rack-and-pinion steering with Servotronic speed-dependent power assist and variable ratio		
Turns (lock-to-lock)	2.9		
Turning circle (curb-to-curb)	39.7 ft.	12.1 m	
SUSPENSION:			
Fully Pneumatic	Air Suspension (with sport tuning) Struts at all four wheels. Damping characteristics are continuously adjusted via sensors. Four driver-activated suspension settings (Dynamic, Standard, Lift, and Automatic)		
BRAKES:			
Front, size and type	Dual circuit brake system with diagonal split, Anti-lock Brake System (ABS), Electronic Brake pressure Distribution (EBD) and Electronic Stabilization Program (ESP); tandem brake booster, hydraulic brake assist, brake servo		
Rear, size and type	15.2 in.	385x36 mm	- Ventilated disc, 2 piston calipers
Parking brake	13.2 in.	335x22 mm	- Ventilated disc, 1 piston caliper
	Electro-mechanically actuated at the rear wheels		
BODY:			
Material	Audi Space Frame construction (aluminum alloy) with aluminum alloy body panels		
Corrosion protection	Multi-step anti-corrosion protection (12 year limited warranty against corrosion perforation)		
WARRANTY/MAINTENANCE:			
	4-Year/50,000 mile new vehicle limited warranty		
	12-Month/5,000 mile (whichever occurs first) NO CHARGE first scheduled maintenance		
CAPACITIES:			
Engine oil	10.6 qt.	10 liter	
Fuel tank	23.8 gal.	90 liter	
Cooling system	16.5 qt.	15.6 liter	
EXTERIOR DIMENSIONS:			
Wheelbase	115.9 in.	2944 mm	
Track: Front	64.1 in.	1629 mm	
Rear	63.6 in.	1615 mm	
Overall length	199.3 in.	5062 mm	
Overall width	74.7 in.	1897 mm	
Overall width with mirrors	79.8 in.	2028 mm	
Height (unloaded)	56.1 in.	1424 mm	
Ground clearance (loaded)	4.72 in.	120 mm	*** Ground clearance is dependent on Suspension Mode setting
(Variance)	+/- 1 in.	+/- 25 mm	*** Ground clearance is dependent on Suspension Mode setting
Curb weight	4586 lbs.	2080 kg	payload 1213 lbs (550 kg) / NHTSA cargo 463 lbs (210 kg) / GVWR 5908 lbs (2680 kg)
Drag coefficient	Cw = 0.29		
INTERIOR DIMENSIONS:			
Seating Capacity	5		
Head room	front	37.3 in.	948 mm (sunroof standard)
	rear	38 in.	965 mm
Shoulder room	front	59.1 in.	1500 mm
	rear	57.5 in.	1461 mm
Leg room	front	41.4 in.	1051 mm
	rear	37.6 in.	954 mm
Int. vol. (EPA)	front	52.8 cu. Ft.	1494.7 liters
	rear	47.5	1345.2 liters
Luggage volume (SAE)	14.6 cu Ft.		412.9 liters
PERFORMANCE:			
0-60 mph	4.9 sec.		
1/4 mile	13.3 sec.		
Top speed	Electronically limited to 155 mph (250 km/h)		
FUEL ECONOMY:			
	EPA Fuel economy estimate	2008	
City	13 mpg		
Highway	19 mpg		
Combined	15 mpg		
FUEL ECONOMY:			
	Canadian fuel consumption	2008	
City	16.6 L/100 km		
Highway	10.8 L/100 km		