

Audi of America
Audi R8 (V10) 5.2 FSI quattro Technical Specifications
2010 Model Year



Technical Specifications		2010 R8 Coupe V10	
ENGINE:			
Type	5.2 liter V10 spark-ignition engine with FSI direct Injection, 90 degree cylinder angle, 4-valve technology, double overhead camshafts (DOHC), intake manifold with charge movement flaps, naturally-aspirated high-revving setup to 8700 rpm,		
Max rpm	8700 rpm		
Arrangement	Mid mounted, longitudinal		
Bore	3.33 in.	84.5 mm	
Stroke	3.65 in.	92.8 mm	
Displacement	317.6 cu. in.	5,204 ccm	
Compression ratio	12.5:1		
Fuel requirement	Premium unleaded		
Horsepower (SAE)	525 hp	@ 8000 rpm	min-1 386 kW
Max. Torque	391 lbs.ft.	@ 6500 rpm	min-1 530 Nm
ENGINE DESIGN:			
Cylinder block	Aluminum alloy incorporating silicon crystals		
Connecting rods	Forged steel		
Pistons	Aluminum		
Crank case	High strength aluminum alloy casting		
Crankshaft	Forged steel, 5 main bearings		
Cylinder head			
Valve train / intake	Continuous intake and exhaust camshaft adjustment, DOHC chain driven		
Firing order	1-6-5-10-2-7-3-8-4-9		
Cooling system	Water-cooled, thermostatically controlled radiator fan		
Lubrication system	Dry sump oil system		
Fuel injection / Ignition system	FSI Direct Injection		
Emission system	Two metal primary catalytic converters, two metal main catalytic converters, four heated oxygen sensors, secondary air system		
Fuel	Super Plus ROZ 98 / Premium unlead (91 AKI)		
ELECTRICAL SYSTEM:			
Battery 1	10 amp/hr		
Alternator	14 volts	190 amp	
DRIVETRAIN:			
Transmission	6-speed manual transmission with launch control, Available R tronic (shift times usually less than 0.1 secs) with launch control		
Type	5.2 FSI quattro Manual		5.2 FSI quattro R tronic
Gear ratios: 1st / 2nd	4.373 / 2.709		4.373 / 2.709
3rd / 4th	1.925 / 1.502		1.925 / 1.502
5th / 6th	1.239 / 1.035		1.239 / 1.035
Reverse	3.713		3.713
Final Drive	3.077		3.077
Center Differential	Viscous clutch		
STEERING:			
Type	Hydraulically assisted rack-and-pinion steering		
Ratio	17.3		
Turning circle (curb-to-curb)	38.7 ft.	11.8 m	
SUSPENSION:			
Front	Double aluminum wishbone front suspension (higher tuning than V8)		
Rear	Double aluminum wishbone rear suspension (higher tuning than V8)		

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Technical Specifications (cont.)		2010 R8 Coupe V10	
BRAKES:			
Service brake	Disc brakes, internally vented, 8-piston brake callipers at front and 4-piston at rear		
Front size	14.4 in.	365 mm	
Rear size	14.0 in.	356 mm	
Parking brake	Mechanically actuated at the rear wheels		
WHEELS (standard only):			
Size	Front: 8.5Jx19 and Rear: 11Jx19 alloy wheels		
TIRES (standard only):			
Size	Front: 235/35 91Y and Rear: 295/30 100Y		
BODY:			
Material	Audi space frame (ASF)		
Corrosion protection	Multi-step anti-corrosion protection		
CAPACITIES:			
Engine oil	12.7 qt.	12.0 liter	
Fuel tank	23.8 gal.	90 liter	
Reserve	2.6 gal.	10 liter	
Cooling system	5.3 gal.	24.0 liter	
EXTERIOR DIMENSIONS:			
Wheelbase	104.3 in.	2,650 mm	
Track front / rear	64.3/ 62.8 in.	1,632/ 1,595 mm	
Overall length	174.6 in.	4,435 mm	
Overall width w/o mirrors	76.0 in.	1,930 mm	
	80.0 in.	2,029 mm	
Height	49.3 in.	1,252 mm	
	5.2 FSI quattro Manual		5.2 FSI quattro R tronic
Curb weight	3,715 lbs.	1,685 kg	3,726 lbs. 1,690 kg
Distribution front / rear [%]	44/56		
Drag coefficient	0.36		
INTERIOR DIMENSIONS:			
Seating Capacity	2		
EPA class	n/a		
Head room	n/a		
Shoulder room	n/a		
Leg room	n/a		
Int. vol. (EPA)	n/a		
Luggage capacity trunk/ behind seats	3.53 cu ft (100 liters) / 3.18 cu ft (90 liters)		
PERFORMANCE:			
	5.2 FSI quattro Manual		5.2 FSI quattro R tronic
0-60 mph	3.7 sec.		3.7 sec.
0-100 km/h	3.9 sec.		3.9 sec.
0-200 km/h	12.0 sec.		12.0 sec.
1/4 mile			
Top speed	196 mph	316 km/h	196 mph 316 km/h
Lateral acceleration	1.2 g		
FUEL ECONOMY:			
	5.2 FSI quattro Manual		5.2 FSI quattro R tronic
	<u>EPA estimate</u>		<u>EPA estimate</u>
City	12.0 mpg		13.0 mpg
Highway	20.0 mpg		20.0 mpg
Combined	15.0 mpg		16.0 mpg