### Technical Specifications: 2005 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. Ininitely 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, hydronic fan and electric fan, coolant circulation, and woter cooled alternator.
- **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
- **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
- **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 - Vented disc, 2 piston calipers
- **Rear, size and type**: 13.2 in. / 335x22 mm - Vented disc, 1 piston caliper
- **Parking brake**: Electro-mechanically actuated at the rear wheels

#### TIRES:

- **Standard 19” (HT2) a/s**: 255 / 40 19 H Y
- **Standard 19” (HT2) Perf.**: 275 / 35 19 V Y
- **Optional 20” (H9N) a/s**: 255 / 45 20 V Y
- **Optional 20” (H9N) Perf.**: 275 / 35 20 V Y
- **Speed rating**: V Y H H
- **Construction**: Radial Radial Radial Radial
- **Load Index**: 100 102 99 99
- **Brand / Type (all approved)**: Pirelli P Zero Rosso Pirelli P6 Four Seasons Dunlop Sportmaxx Conti TouringContact Ch 95 Conti Sport Contact 2

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**6-speed Tiptronic transmission**
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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
- **Height (unloaded):** 57.3 in., 1455 mm
  - **Ground clearance:** (loaded) 4.72 in., 120 mm; (variance) +/- 1 in., +/- 25 mm
    - ***Ground clearance is dependent on Suspension Mode setting***
- **Curb weight:** 4729 lbs., 2145 kg
- **Drag coefficient Cw:** = 0.27

#### 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 57.3 in., 1455 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 (0-80km/h):** 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
- **Combined:** 17 mpg

#### FUEL ECONOMY: Canadian Estimate
- **City:** 16.9 liters/100km
- **Highway:** 10.5 liters/100km

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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 these circumstances, you should equip your vehicle with four all-season or winter tires, which offer better traction under these 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 to 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.