



STāSIS - Audi R8 4.2 Exhaust

General Description

The STāSIS R8 V8 exhaust system is a direct bolt in, CNC mandrel bent, T304 stainless steel cat-back system. All pipe junctions are TIG welded by hand, and each system is individually serial numbered. The exhaust replaces the heavy, restrictive factory single muffler system with a dual muffler design which incorporates an external “x” style crossover. The STāSIS exhaust retains all heat shields and mounting points used by the OEM system and mates to the OEM exhaust tips that are mounted inside the bumper. This exhaust has been optimized and calibrated with the STāSIS ECU Flash to give a substantial increase across the entire powerband resulting in increases in peak torque and peak horsepower.

STāSIS can be defined as a condition of balance among various forces and that is the driving force behind our unique engineering approach. Drawing on years of motorsport and engineering experience the STāSIS team develops a range of products for a vehicle that work harmoniously together.

System Contents

- (1) STāSIS R8 4.2 cat-back exhaust system
- (2) Vacuum line cap fittings

Supported Audi Vehicles

Model:	R8 4.2
Model Years:	2008-Present
Transmission:	All

Features

- The STāSIS exhaust system is a direct bolt-in replacement, no welding or fabrication is required.
 - All pipes on the STāSIS exhaust system are made of T-304 Stainless Steel and precisely shaped with a CNC mandrel bender to insure an easy and direct bolt-in replacement.
 - All mounting and support plates are precisely manufactured on a CNC laser cutting table.
 - All welds are back gassed using the TIG method for cleanliness, precision and strength.
 - T304 Stainless Steel components are designed and proven to perform in corrosive environments (salted roads and ocean-side communities).



- The single muffler setup used on the OEM system is replaced with a dual muffler design incorporating a “X” style crossover. This allows a small portion of the exhaust pulses from opposing cylinder banks to cross over, creating a vacuum for the next pulse coming through the exhaust. The effect creates a substantial increase in power by reducing the back pressure pulses behind the engine to negative levels. Reprogramming of the ECU in conjunction with the exhaust installation will give further increases in both torque and power due to an optimized calibration for the new airflow characteristics.
- The STāSIS mufflers incorporates reflective (active) and passive technologies to optimize sound and performance. The round muffler chamber has been extensively developed and tested to achieve the desired overall exhaust tone while minimizing exhaust back pressure to the engine.
- STāSIS exhaust systems are designed using the latest in 3D design and sound spectrum analysis software. Measurements of frequency and decibel levels are taken throughout the entire rpm range of the engine and fine tuned to achieve the proper sound quality. The STāSIS muffler design gives an exhaust note that is noticeably deeper and stronger at all throttle applications while maintaining a tone that is not intrusive or “drone” at normal everyday driving speeds.
- This system utilizes the OEM V-band connection just behind the engine. This allows for ease of installation and provides for a proper interface using a custom designed flange to mate with the OEM flange. The exhaust is designed to mount to the existing OEM exhaust hangers to allow for ease of installation.
- All OEM heat shields are retained to ensure no additional thermal stress is introduced into the vehicle’s structural and cosmetic components.
- The tail pipes extend into the factory exhaust tips mounted in the rear bumper cover and require no bumper or tip modifications.
- Every STāSIS exhaust system is tested extensively to simulate the wide range of situations encountered in real world driving. Including but not limited to city commuting, canyon road carving, and multi day track events.

	OEM Audi R8 4.2 FSI	STāSIS
Pipe Diameter- Mid-Pipe to Muffler	65 mm (2.5”)	76 mm (3”)
Pipe Diameter – Tail pipes	55 mm (2.17”)	65 mm (2.5”)
Complete Assembly Weight	29.5 kg (65 lbs)	15.9 kg (35 lbs)

Table 1: Physical differences between the OEM and STāSIS exhaust

STāSIS Engineering R8 4.2 Exhaust/ECU Flash Comparison - Crankshaft Power

