
Exhaust (09.00)

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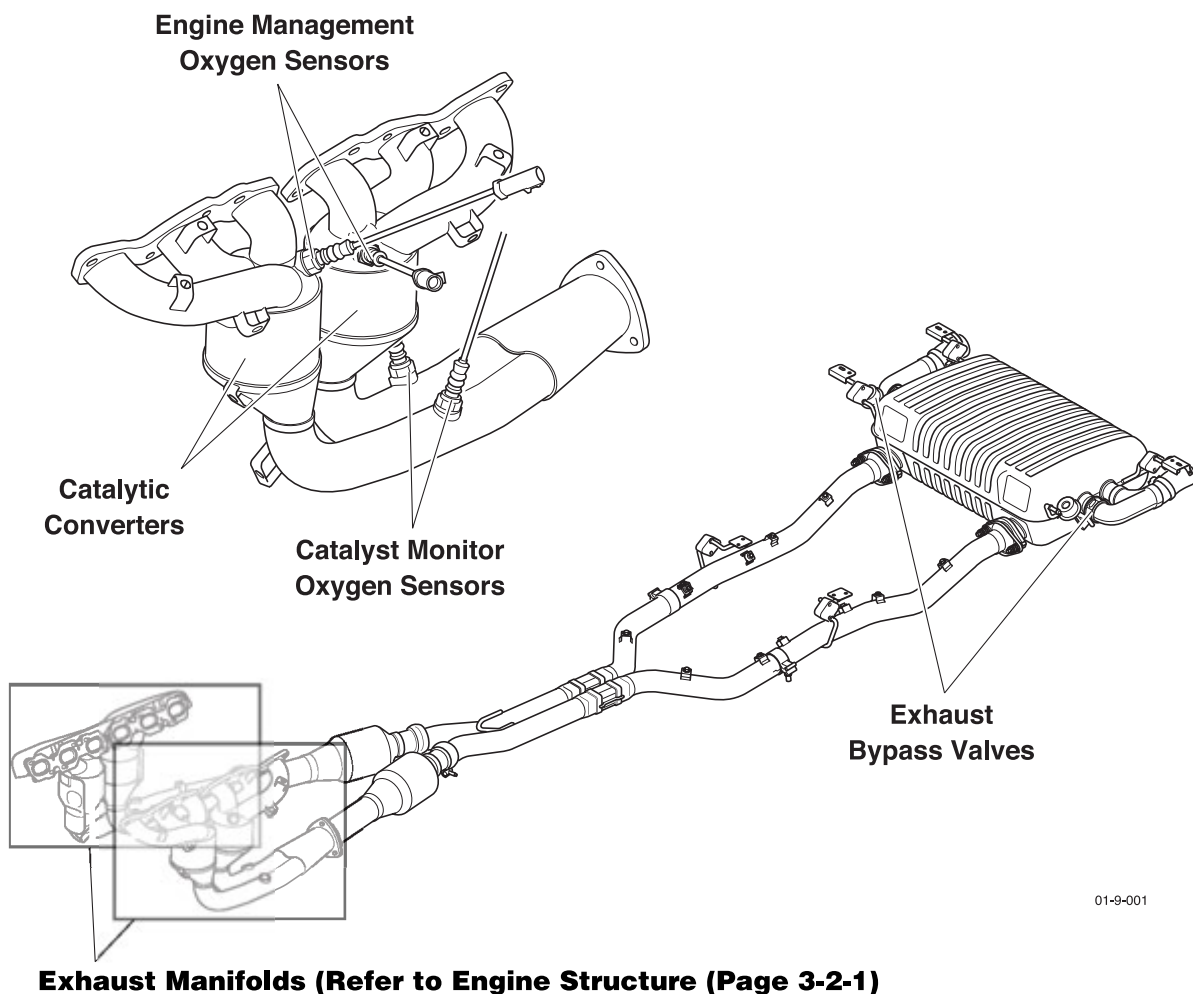
Exhaust System (09.00)

Exhaust Overview

The exhaust system consists of two six-branch manifolds, four primary catalytic converters, eight oxygen sensors, two secondary catalytic converters and a single variable flow silencer assembly.

Exhaust gasses flow from the exhaust manifolds, through the primary catalysts, through the secondary catalysts and on to the rear silencer assembly.

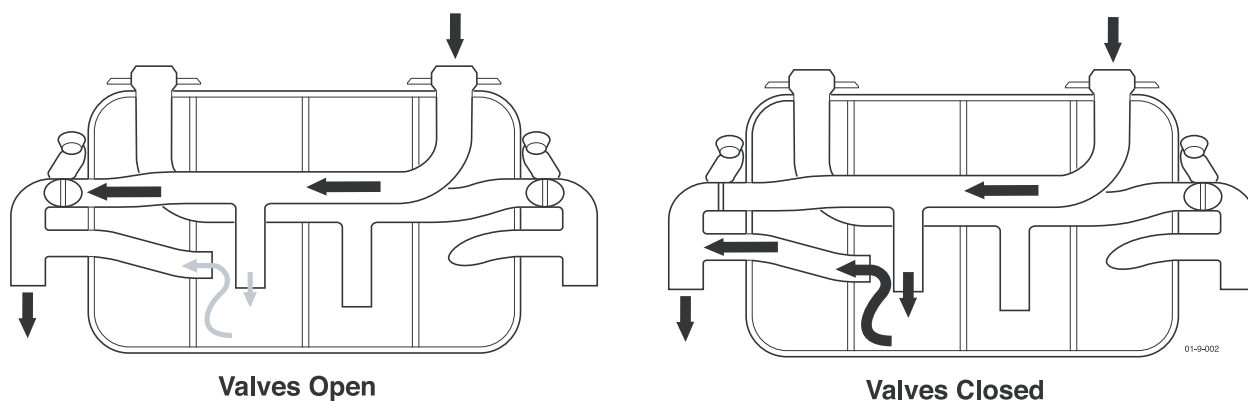
Eight oxygen sensors are installed in the exhaust system. The four engine management oxygen sensors are mounted before the primary catalysts. The four catalyst monitor oxygen sensors are mounted between the primary and secondary catalysts.



01-9-001

Exhaust (09.00)

Silencer Assembly (09.01)



Variable Flow Silencer Assembly

The rear silencer assembly has a variable flow path controlled by two bypass valves.

The system is intended to enhance top end performance in motor sport applications and will not operate in most normal driving conditions.

By directing exhaust gasses through a modified path at high vehicle speeds, exhaust back pressure is reduced and top end performance is enhanced.

As engine speed increase from idle, the bypass valve is open until the engine speed is 1500 rpm.

From 1500 rpm to 3000 rpm, the valve is closed

Above 3000 rpm the bypass valves state is load dependent (fully open at higher loads).



ASTON MARTIN

Exhaust System (09.00)

Pipes and Supports (09.03)

Specifications

Torque Figures		
Description	Nm	lb. / ft.
Catalyst (nuts / bolts)	25.5-34.5	19-25.5
Catalyst (clamps)	19-22	14.5-16.5
Centre pipe to rear pipe (clamp)	39-51	29-38
Rear Pipe to Silencer (bolt)	28-33	21-24.5

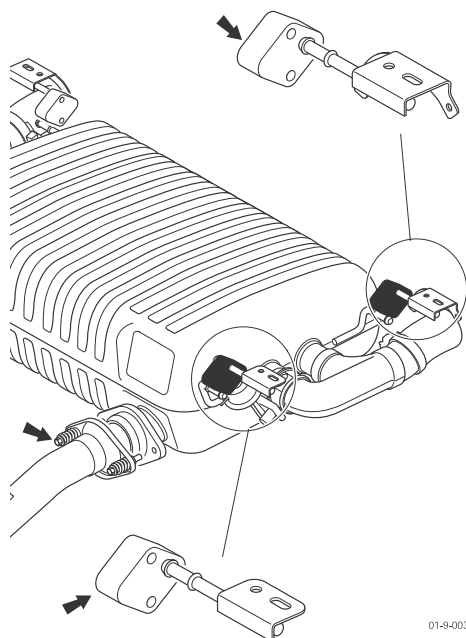
Maintenance

Exhaust System

Repair Operation Time (ROT)	
Item	Code
Exhaust System Renew	09.03.NB

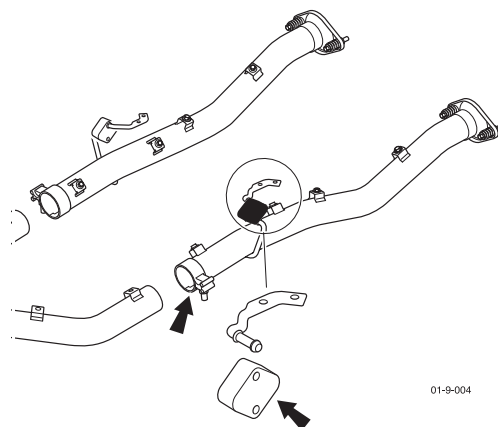
Removal

1. Raise the vehicle and make safe.
2. Remove the shear panel and both undertrays.
3. Disconnect the vacuum lines from the bypass valves.
4. Remove the silencer assembly.
 - 4.1 Release bolts (x4) from LH and RH rear pipes.
 - 4.2 Support the silencer and release the front and rear hangers.
 - 4.3 Withdraw the silencer assembly.



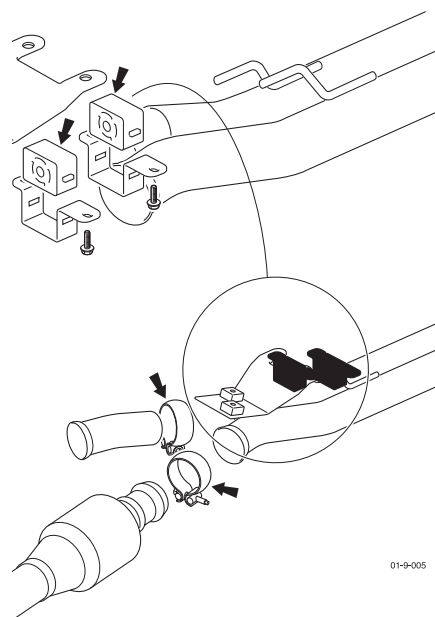
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5. Remove LH and RH rear pipes.
 - 5.1 Remove subframe cross brace.
 - 5.2 Release clamps (2)
 - 5.3 Release LH and RH pipe hangers from body.
 - 5.4 Withdraw LH and RH rear pipes through the subframe.



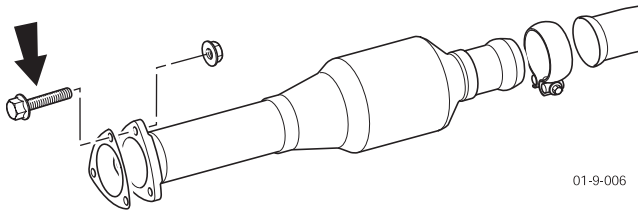
01-9-004

6. Remove the center pipes.
 - 6.1 Release clamps (2).
 - 6.2 Push center pipe rearwards to release from rubber mount.



01-9-005

7. Remove the catalysts.
 - 7.1 Release bolts (x3).
 - 7.2 Withdraw catalyst. Repeat for second catalyst.



Installation

Use a proprietary exhaust sealant around all clamp joints prior to securing loosely. Use new manifold flange gaskets.

1. Install, loosely, the LH and RH catalysts.
2. Install, loosely, the center pipes.
3. Install, loosely, LH and RH rear pipes.
4. Install the silencer and the vacuum lines to the bypass valves.
5. Work from the front and set all bodywork clearances.
6. Tighten all the exhaust fixings.
7. Install the subframe cross brace.