
GROUP 15

INTAKE AND EXHAUST

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AIR INTAKE SYSTEM

AIR DUCT AND AIR CLEANER

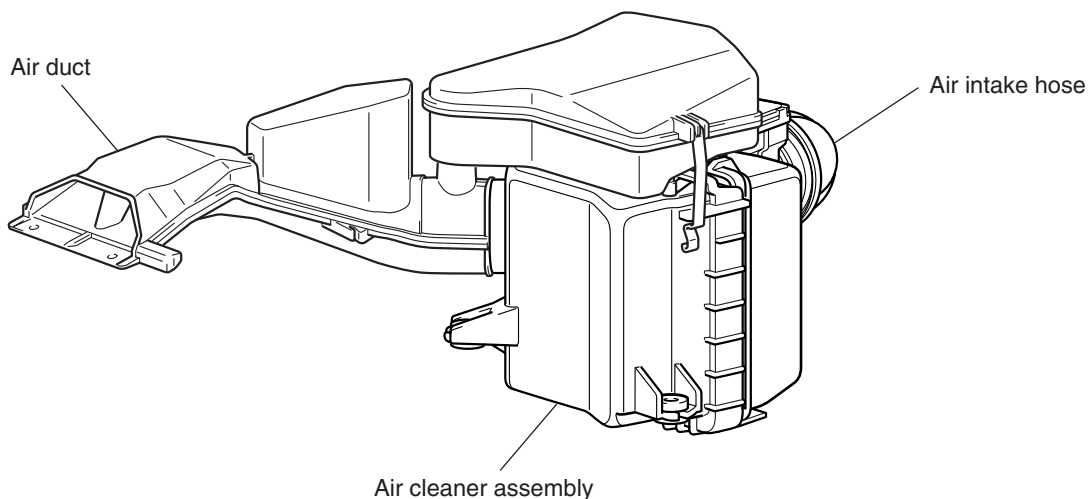
M2150004000407

- A front air intake system that actively sucks cooling air from the front through the top of the radiator has been adopted in order to improve engine performance and reduce air intake noise.

- Recycled, burnable resin materials containing used paper are used to reduce industrial wastes and protect the environment.
- Environmentally friendly unleaded rubber materials are used to make the air intake hose.

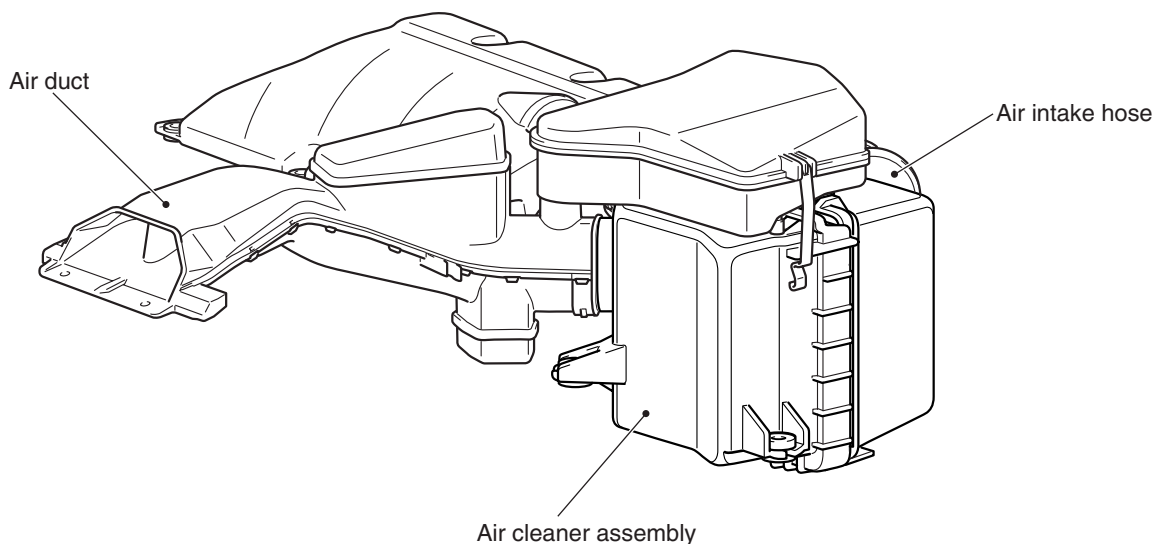
CONSTRUCTION DIAGRAM

<4G63>



AC106977AD

<4G69>

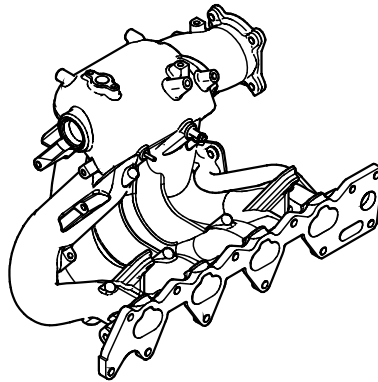


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INTAKE MANIFOLD

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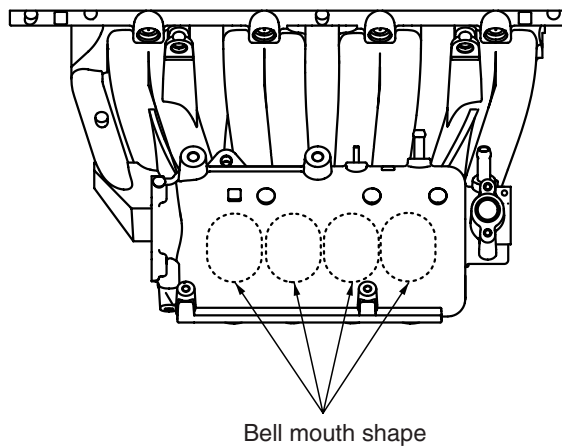
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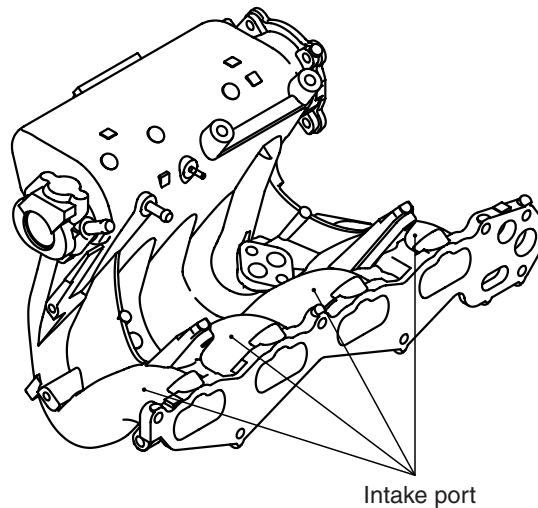
AK501627

In terms of basic structure, the intake manifold are the same as the 4G6 engine intake manifold used in the SPACE RUNNER and SPACE WAGON.

<4G69>



Bell mouth shape



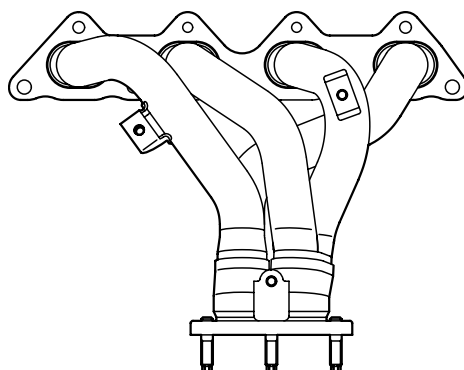
Intake port

AK302279AD

The intake manifold is designed to improve the low, middle and high torque by optimizing the port diameter and length. A port opening with an optimized bell mouth shape and improved the inside roughness of the port reduces airflow resistance.

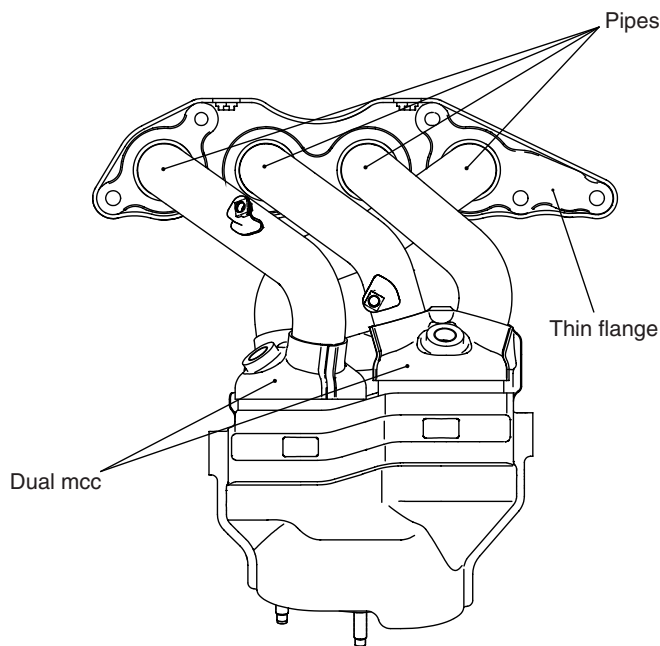
EXHAUST SYSTEM**EXHAUST MANIFOLD**

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<4G64>

AK501628

The exhaust port of a dual method is adopted with in the engine of 4G64-SOHC and the exhaust manifold made of the stainless steel.

<4G69>

AK304022 AB

The exhaust manifold is design to reduce the heat capacity and to improve exhaust gas performance by piping the assembly.

The improvement in the engine performance is designed by preventing the exhaust interference through the dual piping. The improvement of the exhaust gas performance just after the engine start is designed through the quicker warm-up in the catalyst by installing MCC on the dual portion.

The weight reduction is designed by reducing the flange plate thickness.

EXHAUST PIPE AND MUFFLER

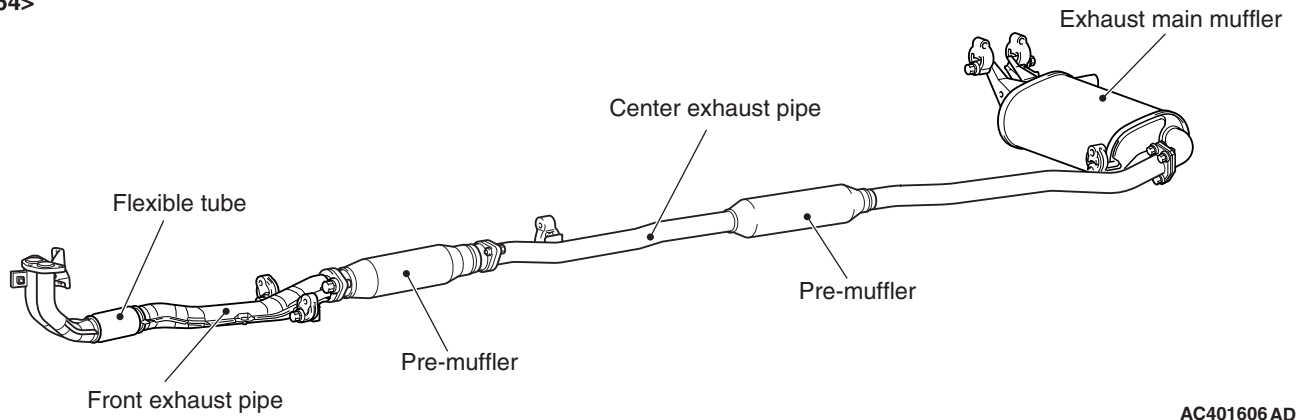
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Exhaust pipe consisting of 3 separation system: front exhaust pipe, centre exhaust pipe, and exhaust main muffler, has the following features:

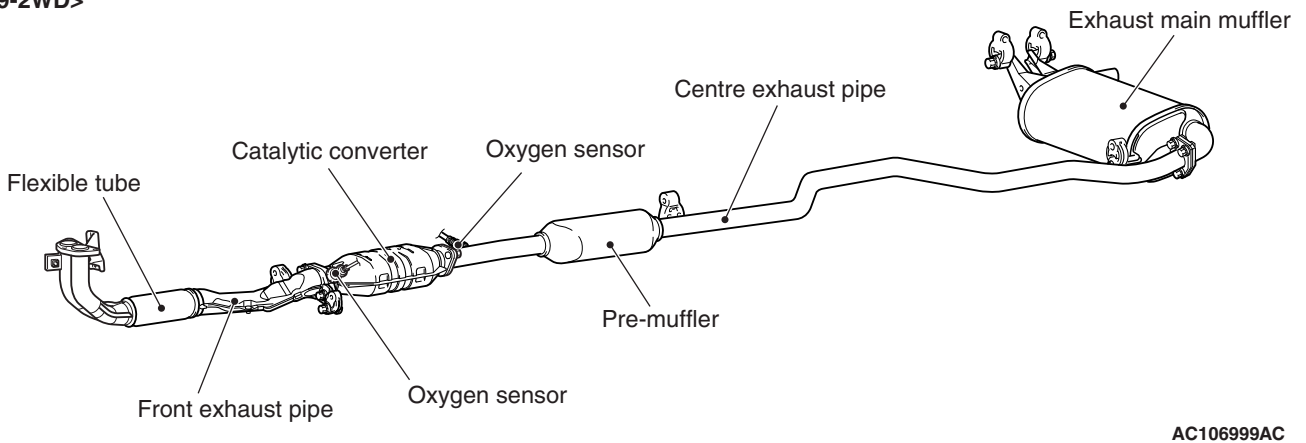
- The adoption of all stainless exhaust piping has enhanced resistance to corrosion and heat.
- Installation of thermal insulating cover and materials on front pipe has improved emission control performance.
- The front pipe incorporates a flexible tube to reduce vibration when the engine is idling.

CONSTRUCTION DIAGRAM

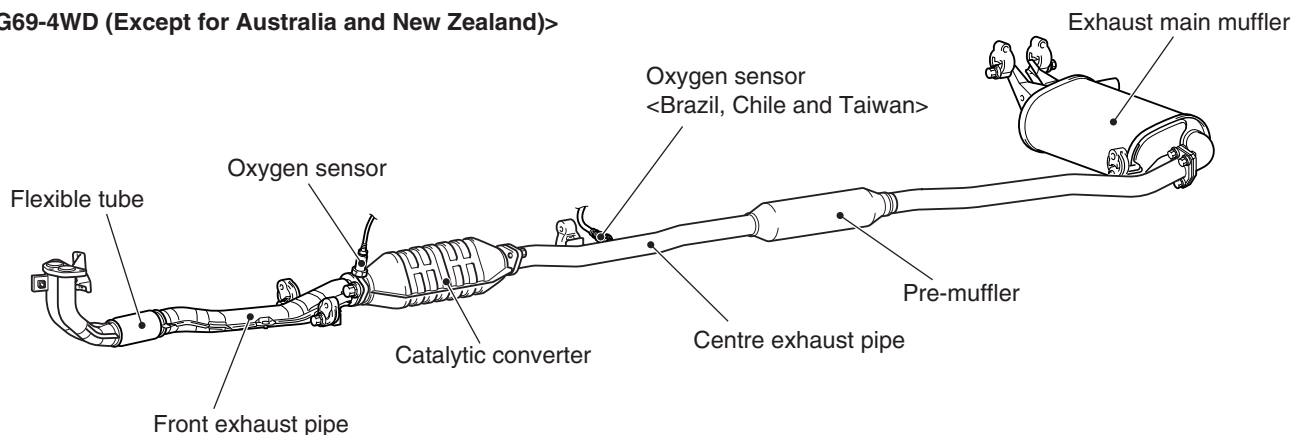
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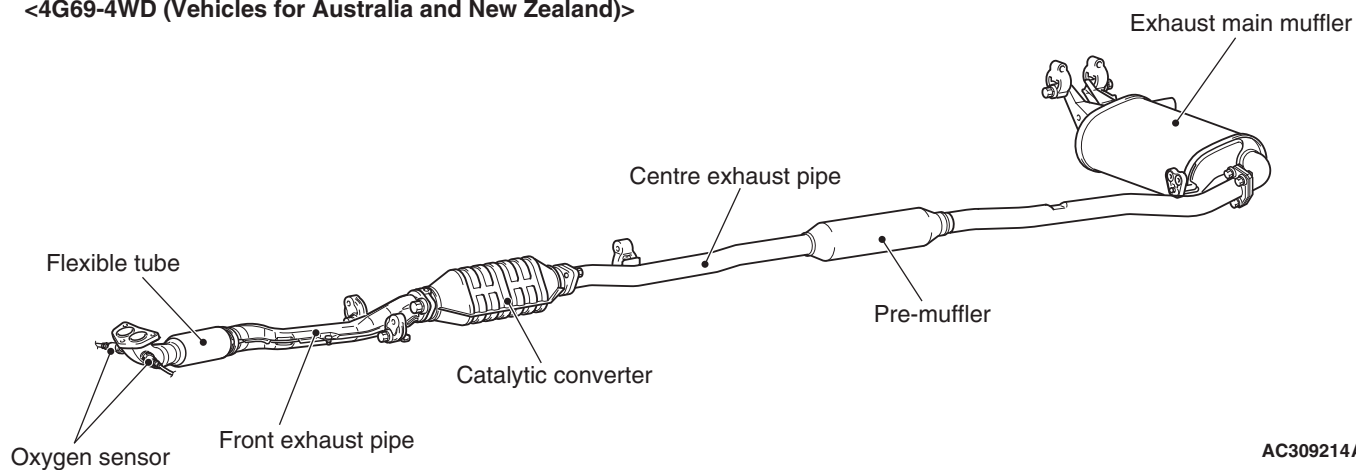
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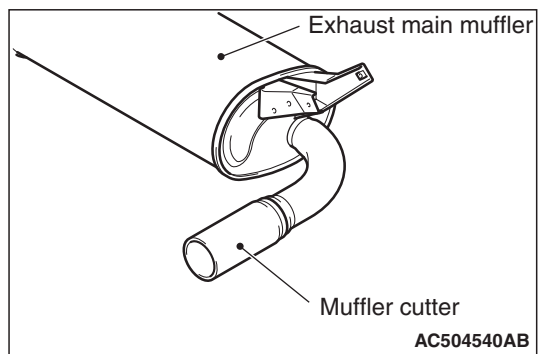
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<4G69-4WD (Vehicles for Australia and New Zealand)>



MUFFLER CUTTER



For some models, the muffler cutter has been added to the exhaust main muffler tail pipe in order to enhance the sporty image.