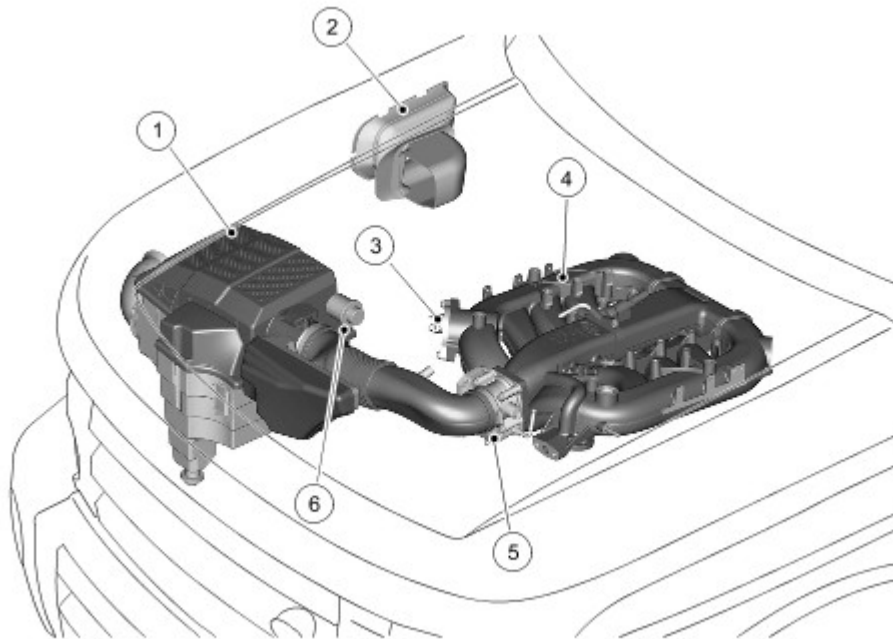




Intake Air Distribution and Filtering

4 Liter V6 Petrol Intake Air Distribution and Filtering Component Location



E45603

Item	Part Number	Description
1	-	Air filter box
2	-	Air intake
3	-	Intake manifold tuning valve (IMTV)
4	-	Intake manifold
5	-	Electronic throttle
6		Filter minder (optional fit)

The 4.0 Liter V6 engine air intake and distribution system comprises:

- Air filter box
- Air intake
- Intake manifold
- Electronic throttle

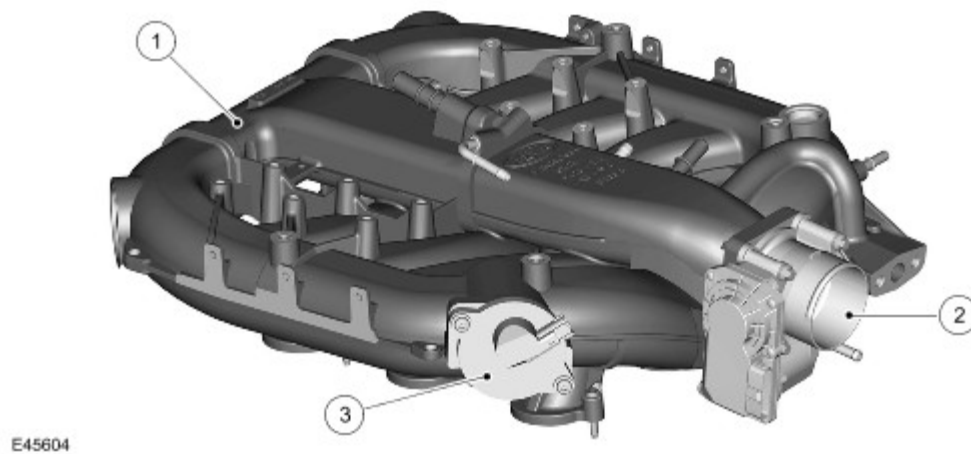
AIR FILTER BOX

The air filter box is located in the front of the engine bay on the inside of the RH front wing. Air is drawn from the air intake in the wing through the wing cavity and into the air filter box.

After the air filter box there is a resonator located after the Mass Air flow/ Intake Air Temperature (MAF/IAT) sensor.

INTAKE MANIFOLD

Air Intake Manifold

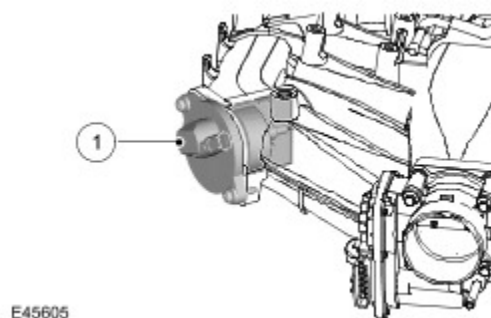


Item	Part Number	Description
1	-	Intake manifold
2	-	Electronic throttle
3	-	Inlet manifold tuning (IMTV)

The intake manifold is located on top of the engine between the two cylinder banks. The manifold is manufactured from an aluminium alloy. The intake manifold comprises a central chamber with six tracts leading to the inlet ports on the cylinder heads.

INTAKE MANIFOLD TUNING VALVE (IMTV)

Intake Manifold Tuning Valve



Item	Part Number	Description
1	-	Intake Manifold Tuning Valve (IMTV)

Intake Manifold Tuning Valve

The Intake Manifold Tuning Valve (IMTV) is located at the front right hand side of the air intake manifold. The IMTV is controlled by a PWM signal from the ECM. For additional information, refer to [Electronic Engine Controls](#) (303-14A Electronic Engine Controls - 4.0L).

The IMTV moves a plate within the inlet manifold to allow or block sonic pulses between the split manifold halves. This, in effect, extends the inlet runners and optimises for better low rpm torque.