

## **SECTION : 303-12 Intake Air Distribution and Filtering**

**VEHICLE APPLICATION : 2008.0 Falcon**

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## SPECIFICATIONS

### Torque Specifications

Description	Nm
Air cleaner bolt	9
Air cleaner intake pipe screw	2.5
Air cleaner assembly screw	12
Air cleaner intake manifold duct screw	—
Air cleaner to intake manifold duct clamp	(2.2-3.0)



## DESCRIPTION AND OPERATION

### Intake Air Distribution and Filtering

All engines are equipped with dry type air cleaners that have serviceable PET(plastic fibre) filtering elements. Air enters the air cleaner from the front grille, through a duct above the radiator shroud, and then passes through the filter element. Dust particles are trapped in the filter element as the air passes through it. After leaving the filter element, the air passes through an intake duct into the throttle body.

### Intake Air Distribution and Filtering

The air intake system consists of the following components:

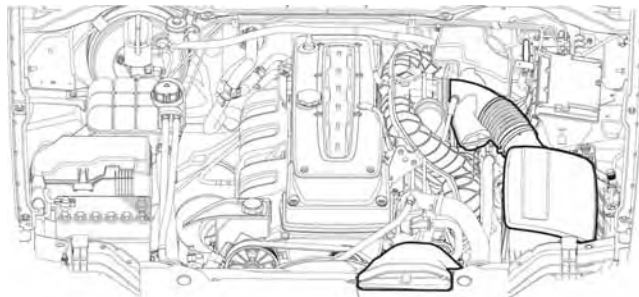
- Air cleaner
- Air cleaner element
- Air cleaner outlet tube
- Inlet tube
- Resonator assembly

### The Intake Air System

- Filters intake air with a replaceable air cleaner element.
- Measures intake air temperature and manifold absolute pressure.

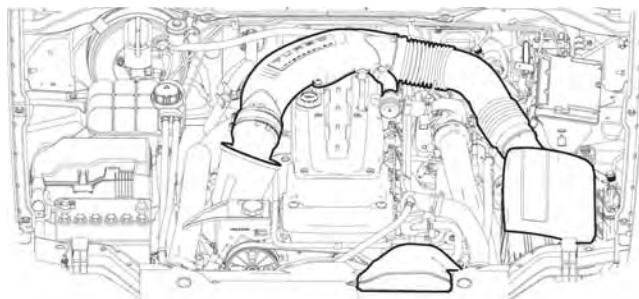
The air cleaner assembly is secured to the LH fender inner panel with three insulator mountings. The top cover is attached to the air cleaner tray by four spring clips.

**I6**



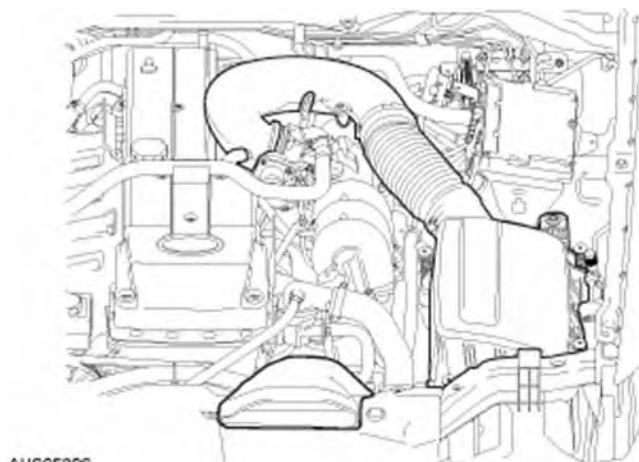
AUS02254A

**I6 Turbo**



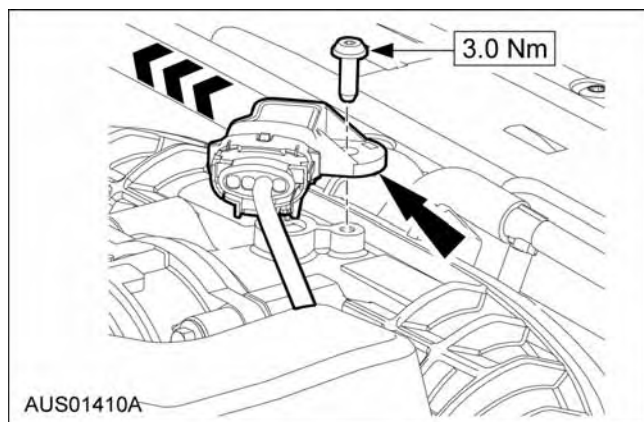
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**I6 E-Gas**



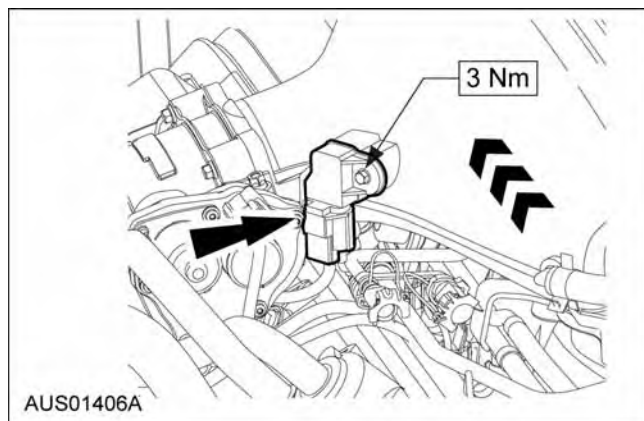
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**I6**



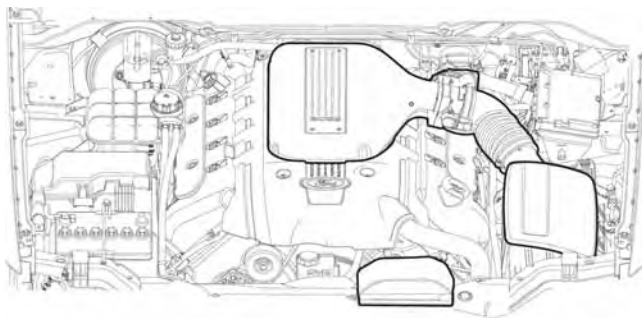
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**V8**



AUS01406A



**DESCRIPTION AND OPERATION (Continued)****V8**

AUS04762A



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## DIAGNOSIS AND TESTING

### Intake Air Distribution and Filtering

For diagnosis and testing of the intake Air temperature and Manifold absolute pressure sensor, refer to Section 303-14.



## GENERAL PROCEDURES

### Cleaning and Inspection

#### Air Cleaner Element

The PET plastic fibre filter element must not be cleaned with a solvent or cleaning solution. Also, oil must not be added to the surfaces of the filter element or air cleaner body. The element should be cleaned by tapping it lightly on a horizontal surface or using compressed air. Direct a stream of compressed air through the element in the opposite direction to intake air flow, that is, from the inside outward. Extreme care must be exercised to prevent rupture of the element material.

#### Inspection

Hold the filter in front of a light and carefully inspect it for any splits or cracks. If the filter is split or cracked, replace it.

#### Body and Cover

Clean the air cleaner body and the cover with a solvent or compressed air. Wipe the air cleaner dry if a solvent is used. Inspect the air cleaner body and cover for distortion or damage at the gasket mating surfaces. Replace the cover or body if they are damaged beyond repair.



## REMOVAL AND INSTALLATION

### Air Cleaner Body

#### Removal

1. Remove the retaining screws from the front sheet metal crossmember. Detach the air intake tube from the front crossmember and air cleaner body.
2. Back off the air cleaner lid to flexible air duct tube worm drive clamp until loose on its collar.
3. Remove the three air cleaner mounting screws and remove the air cleaner assembly.

#### Installation

1. Position the air cleaner assembly to the fender inner panel and install the three mounting screws.
2. Slide the flexible air duct forward into the air cleaner lid and tighten the air cleaner lid worm drive clamp.
3. Attach the air intake tube to the lower air cleaner body, position on front sheet metal and install retaining screws.

### Air Cleaner Element

#### Removal

1. Release the spring clips and lift the air cleaner cover away.
2. Remove the air filter element.

#### Installation

1. Install the air cleaner element into the air cleaner body.
2. Install the cover and air duct assembly. Secure the cover retaining clips (ensuring tight seal of mating surfaces).

### Engine Air Ducting

#### Removal

1. Back off the air cleaner lid worm drive clamp until loose on its collar.
2. Remove screws from plastic air duct above engine intake manifold.
3. Slide air duct rearwards out of air cleaner.
4. Slide air duct off throttle body and remove from engine bay.

#### Installation

1. Position duct assembly in engine bay.
2. Position duct and rubber collar onto throttle body.
3. Slide the duct forward into the air cleaner lid.
4. Install duct to inlet manifold screws.
5. Tighten the air cleaner lid worm drive clamp.

