

## SPECIFICATIONS

### GENERAL INFORMATION

The following information is applicable to GT, F6 Typhoon, Pursuit Ute or F6 Tornado vehicles fitted with the FPV Performance brake system.

#### General Specifications

Description	Specification
Front lining wear limit (measured from the back of the backing plate shim.)	7.5 mm
Rear lining wear limit (above backing plate)	1.5 mm
<b>Lubricants</b>	
High performance SUPER DOT 4 brake fluid	ESZ-M6C55-A
Brembo copper grease supplied with brake pad kit	Molykote CU-7439+ (supplied in pad replacement kit).
<b>Master Cylinder</b>	
Main bore diameter	23.8 mm
Fast fill bore diameter	31.75 mm
Min. Total stroke	32.52 mm
<b>Caliper (Front)</b>	
Type	Brembo 4-pot opposed piston caliper
AI Head Bore Diameter	2x36 / 2x40 mm
<b>Caliper (Rear)</b>	
Type	PBR 1-pot floating piston caliper
Bore Diameter	1 x 45 mm
<b>Disc (Front)</b>	
Type	Cast Iron - Ventilated
Diameter	355 mm
Thickness (New)	32 mm
Max. Runout	0.03 mm
Thickness Variation	0.04 mm
Min. Thickness Refaced (overall)	30.0 mm
Min. Thickness Refaced (inner face)	8.2 mm
Min. Thickness Refaced (outer face)	9.2 mm
Surface Finish (uRa)	2.4
Balance	3.4g x 177.5 mm (6 Nmm)
<b>Disc (Rear)</b>	
Type	Cast Iron - Ventilated
Diameter	328 mm
Thickness (New)	26 mm
Max. Runout	0.035 mm
Thickness Variation	0.050 mm
Min. Thickness Refaced (overall)	24 mm
Min. Thickness Refaced (inner face)	8.5 mm
Min. Thickness Refaced (outer face)	7.5 mm
Brake Face Surface Finish (uRa)	3.2
Balance	540 gmm
Park Brake Bore Surface Finish (uRa)	3.2
Max. Park Brake drum diameter	No wear specification.

**DESCRIPTION AND OPERATION (Continued)****GT GT-P & F6 Typhoon**

Ride Height	Camber				Castor				Total Toe at kerb height		
	Min. °	Opt. °	Max. °	Max. Variation °	Min. °	Opt. °	Max. °	Max. Variation °	Min. °	Opt. °	Max. °
340	-1.52	-1.02	-0.52	0.7	7.32	7.82	8.32	0.7			
350	-1.22	-0.72	-0.22	0.7	7.21	7.71	8.21	0.7			
360	-0.95	-0.45	+0.05	0.7	7.10	7.60	8.10	0.7			
370	-0.71	-0.21	+0.29	0.7	6.99	7.49	7.99	0.7	+0.06	0.16	0.26
380	-0.50	0.00	+0.50	0.7	6.88	7.38	7.88	0.7			
390	-0.33	+0.17	+0.67	0.7	6.77	7.27	7.77	0.7			
400	-0.17	+0.33	+0.83	0.7	6.65	7.15	7.65	0.7			

**Super Pursuit, Pursuit Ute & F6 Tornado**

Ride Height	Camber				Castor				Total Toe at kerb height		
	Min. °	Opt. °	Max. °	Max. Variation °	Min. °	Opt. °	Max. °	Max. Variation °	Min. °	Opt. °	Max. °
340	-1.92	-1.42	-0.92	0.7	5.70	6.20	6.70	0.7			
350	-1.63	-1.13	-0.63	0.7	5.56	6.06	6.56	0.7			
360	-1.37	-0.87	-0.37	0.7	5.43	5.93	6.43	0.7			
370	-1.13	-0.63	-0.13	0.7	5.30	5.80	6.30	0.7	+0.06	0.16	0.26
380	-0.93	-0.43	+0.07	0.7	5.18	5.68	6.18	0.7			
390	-0.76	-0.26	+0.24	0.7	5.06	5.56	6.06	0.7			
400	-0.61	-0.11	+0.39	0.7	4.93	5.43	5.93	0.7			

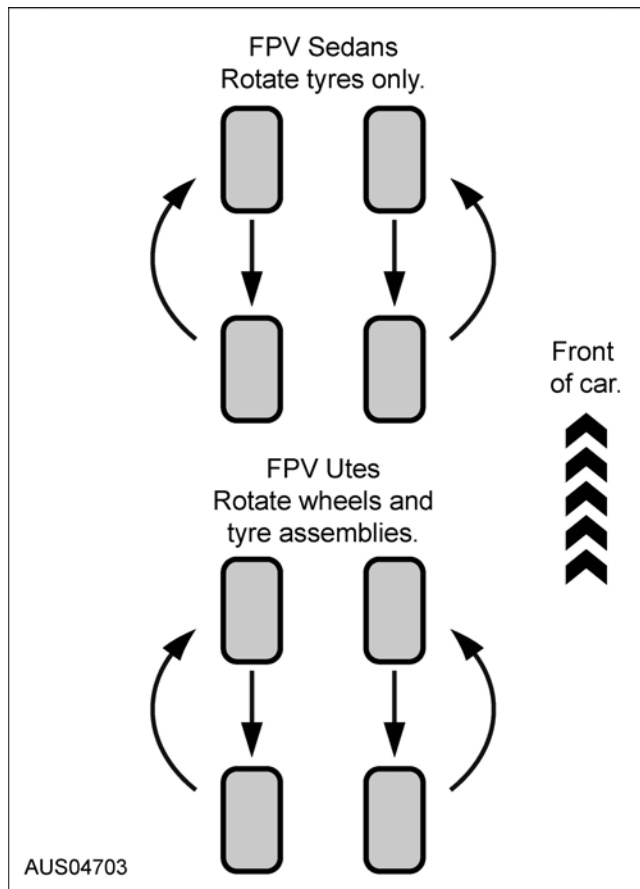
**Rear Wheel Alignment****GT GT-P & F6 Typhoon**

Ride Height	Camber				Total Toe at kerb height		
	Min. °	Opt. °	Max. °	Max. Variation °	Min. °	Opt. °	Max. °
340	-1.35	-1.10	-0.85	0.5			
350	-1.14	-0.89	-0.64	0.5			
360	-0.95	-0.70	-0.45	0.5			
370	-0.75	-0.50	-0.25	0.5	+0.06	0.16	0.26
380	-0.56	-0.31	-0.06	0.5			
390	-0.37	-0.12	+0.13	0.5			
400	-0.13	0.12	0.37	0.5			

## GENERAL PROCEDURES

### Wheel and Tyre Rotation

1. Tyre rotation should be performed at the intervals detailed in the service schedule.



**NOTE:** The rear wheels fitted to FPV sedans have a different off-set to the front wheels. Consequently, tyre rotation must be performed by removing the tyres from the rims.

**Refer to section 204-04 of the Falcon Workshop Manual for other general procedures.**

## DIAGNOSIS AND TESTING

### Brake System

For detailed diagnostic procedures, refer to BF Falcon Workshop Manual Section 206-00.

#### Pad Wear

1. If a lining has worn to a thickness of 7.5 mm measured from the back of the pad backing plate shim, at any one of three measuring locations or if there is more than 3 mm taper from end to end replace all (4) pad assemblies on both front or both rear wheels to maintain even braking. Refer to Section 206-03C or Section 206-04C for replacement of parts.

#### Disc Wear and Runout

1. If the lateral run-out exceeds specifications, resurface or replace the disc.
2. Refer to Specifications section for refinishing specifications. Refer to Section 206-03C or Section 206-04C for information regarding disc replacement.

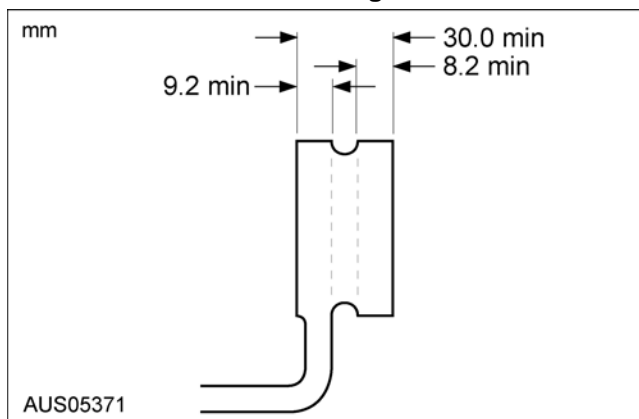
#### Disc Thickness and Refinishing

Measure the thickness of the disc to determine if it is within the specifications.

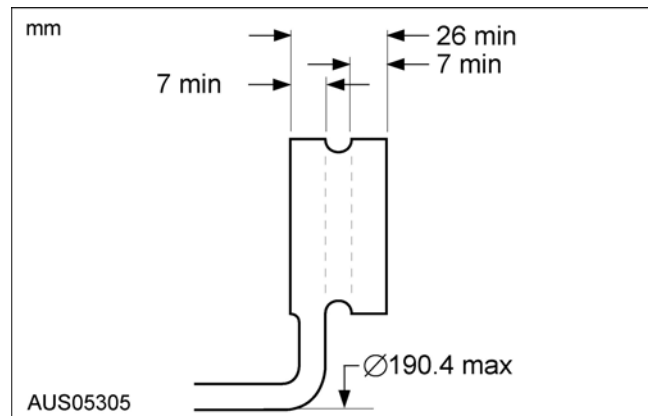
Use a disc brake lathe to refinish the disc brake discs. Refer to Specifications for the remainder of the refinishing specifications.

**⚠ CAUTION: Do not conduct disc machining on lathes fitted with a spring loaded head. Damage to lathe and disc will result.**

#### Front Disc Brake Resurfacing Limits



#### Rear Disc Brake Resurfacing Limits

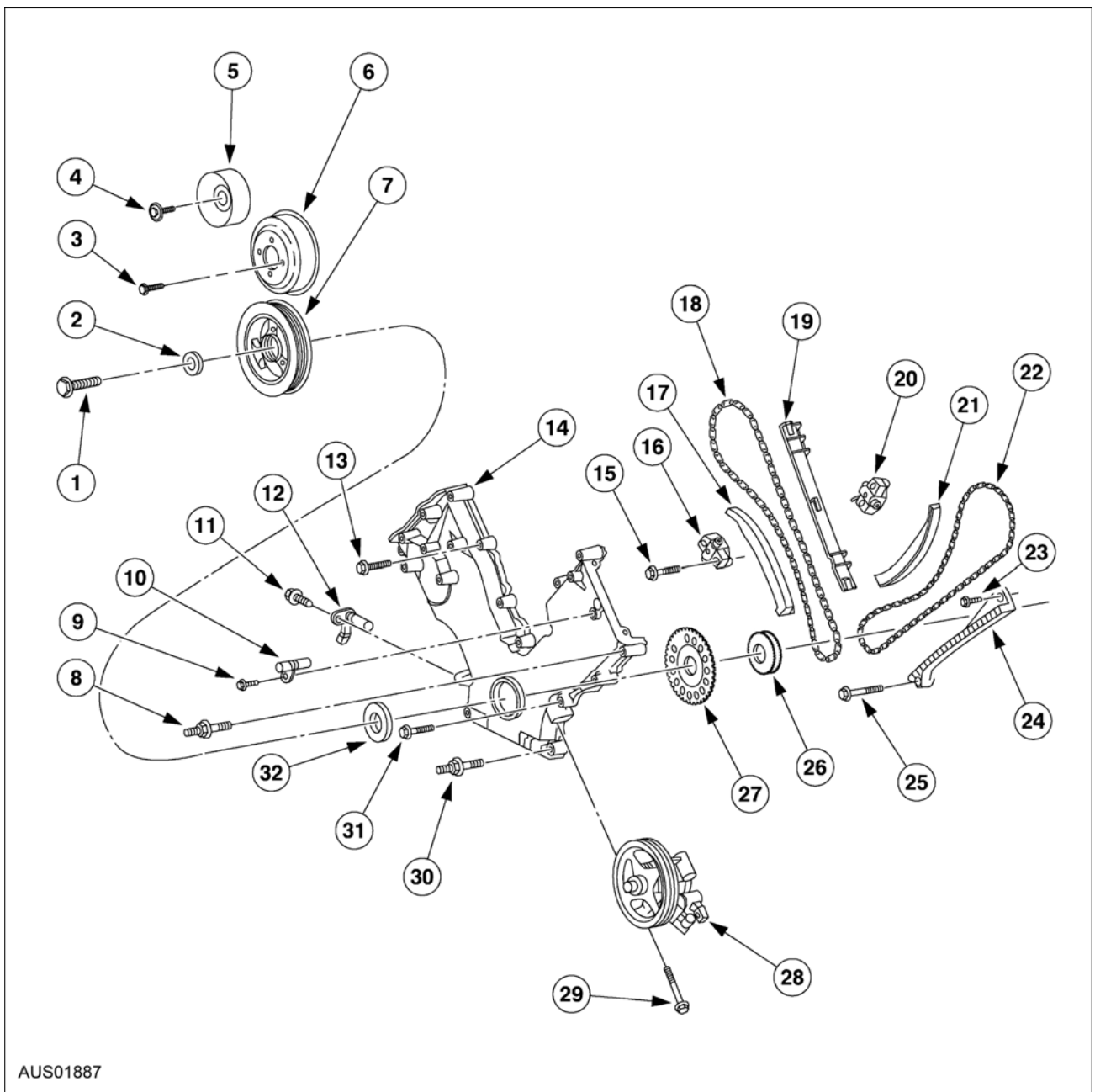


## SECTION : 303-01c Engine — V8 (4V)

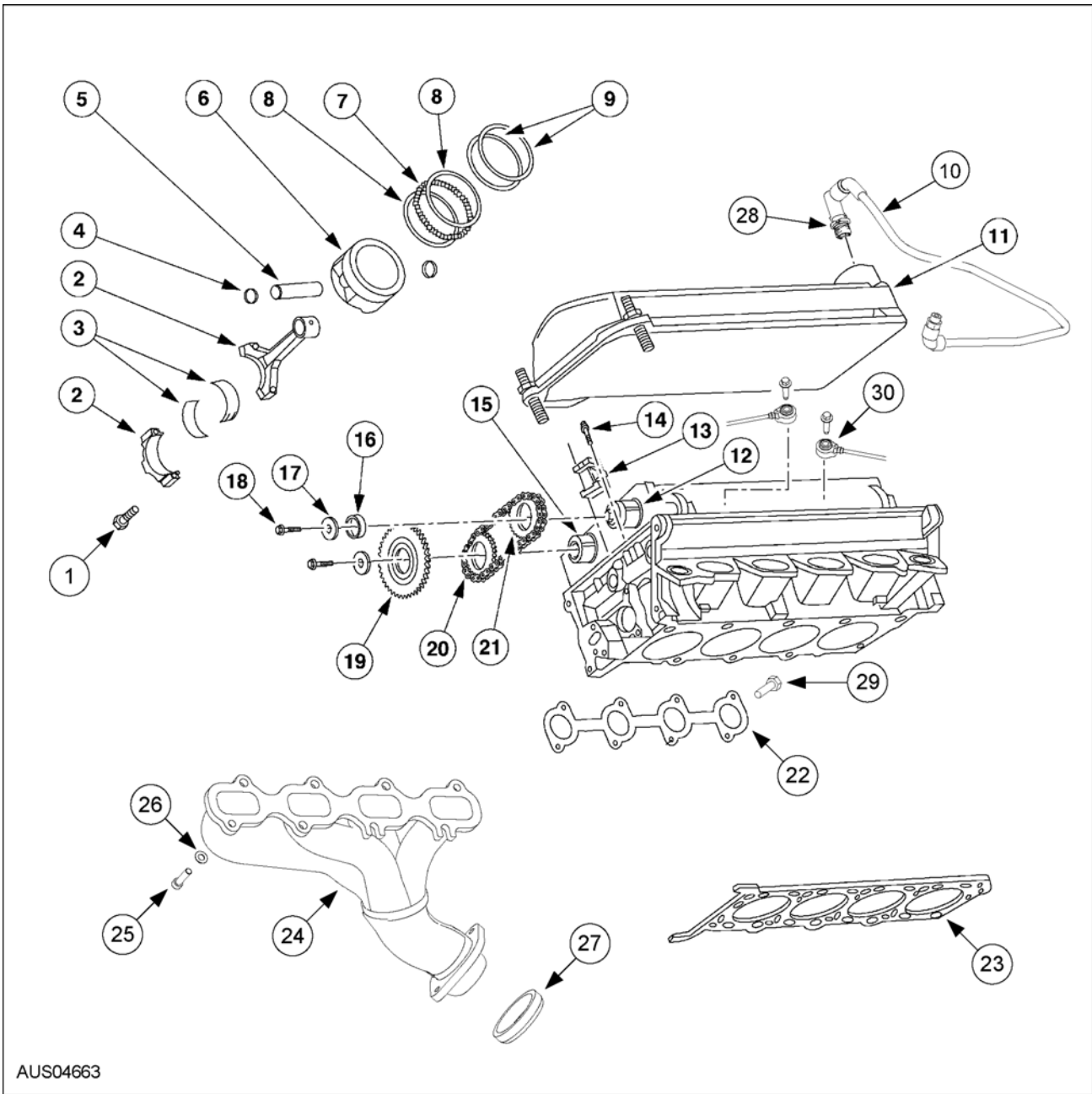
**VEHICLE APPLICATION :** 2006.0 FPV GT/GT-P, Pursuit, Super Pursuit

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**DESCRIPTION AND OPERATION (Continued)**

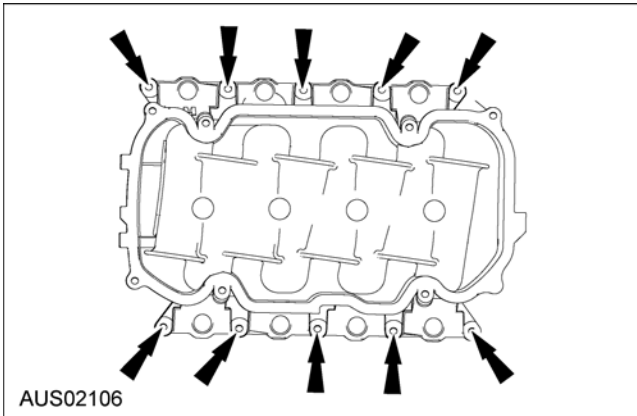


**DESCRIPTION AND OPERATION (Continued)**

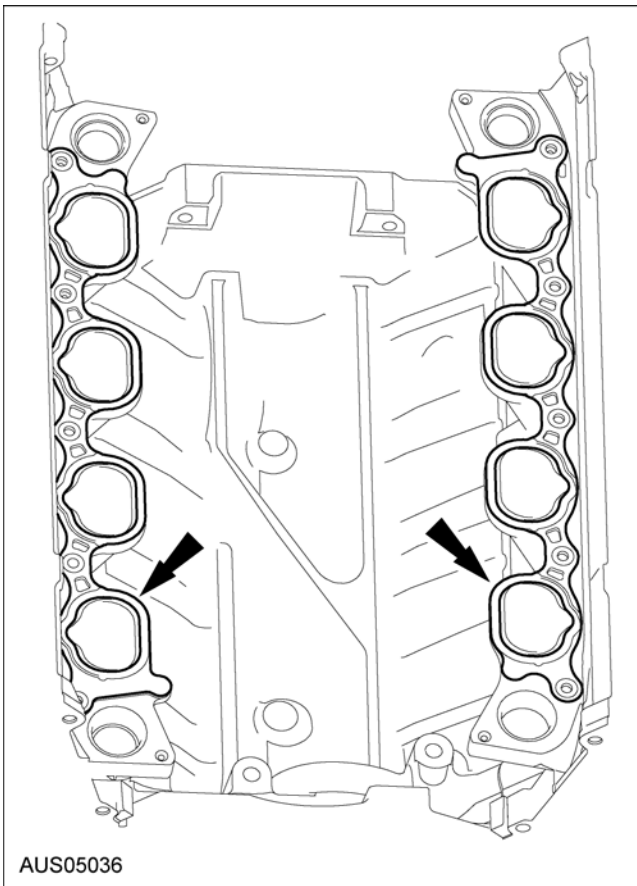


### IN-VEHICLE REPAIR (Continued)

5. Remove the lower intake manifold bolts and lower intake manifold.

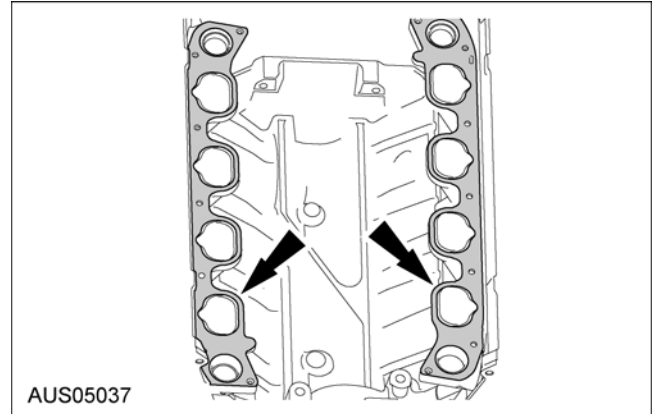


6. Remove the gaskets and discard.



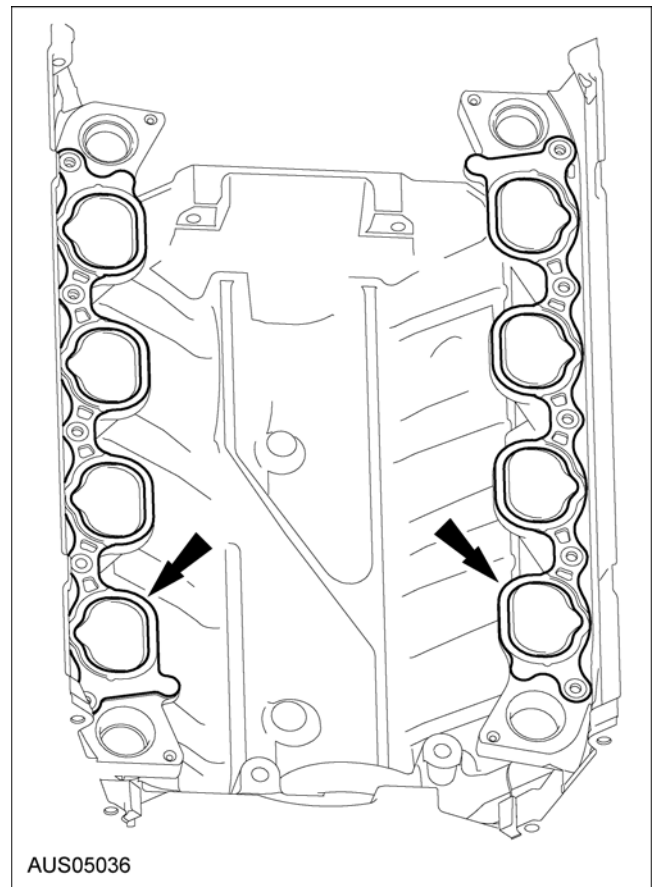
7. Clean the sealing surfaces.

**⚠ CAUTION:** Do not use metal scrapers, wire brushes, power abrasive discs or other abrasive means to clean the sealing surfaces. These tools cause scratches and gouges which make leak paths. Use a plastic scraping tool to remove all traces of old sealant.



#### Installation

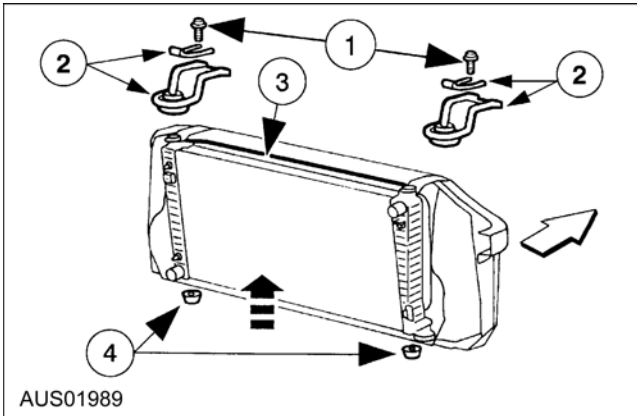
1. Install the lower intake gaskets.





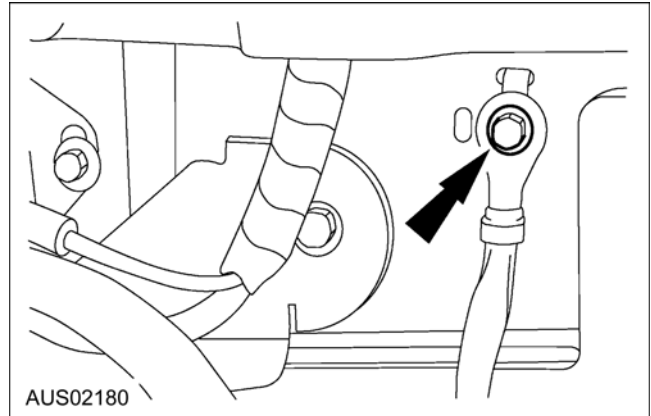
**REMOVAL (Continued)**

8. Disconnect the surge tank hose from the radiator.
  1. Release the clamp.
  2. Slide the hose off the radiator fitting.
9. Remove the surge tank from vehicle.
  1. Disconnect vent and supply hoses from surge tank.
  2. Remove surge tank from vehicle.
10. Remove the radiator.

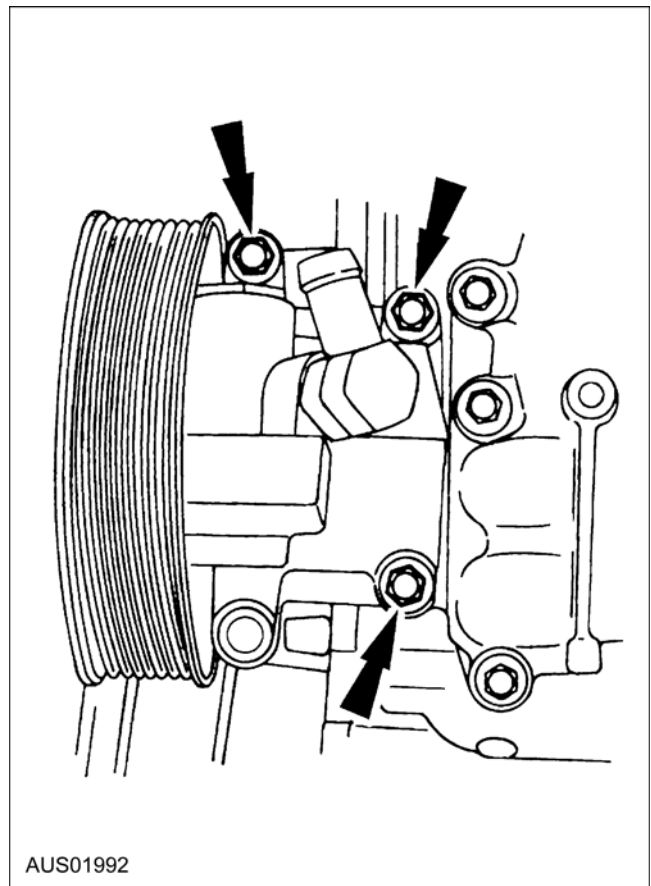


1. Remove the bolts.
2. Remove the upper radiator support brackets.
3. Remove bolts attaching condenser to radiator.
4. Lift the radiator off the radiator mounting insulators.
5. Remove the radiator mounting insulators.
11. Remove the accessory drive belt. For additional information, refer to Section 303-05 of the BF Falcon Workshop Manual.
12. Disconnect the alternator electrical connectors.
13. Disconnect battery and alternator cables from RH Relay box.
14. Remove PCM, refer to Section 303-14 of the BF Falcon Workshop Manual.
15. Disconnect the wiring harness (PCM 'A' connector & 24 pin connector) from vehicle.
16. Disconnect transmission wiring harness from transmission.
17. Disconnect HEGO sensor wiring plugs. Refer to chapter Section 303-14 of the BF Falcon Workshop Manual for more information.

18. Remove the ground strap retaining bolt.

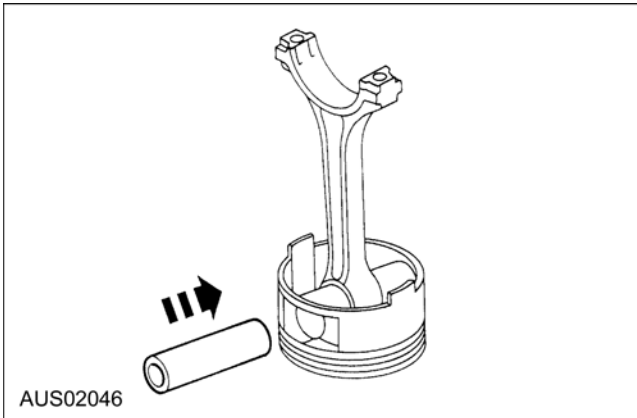


19. Disconnect the heater hoses from rear of engine.
20. Disconnect brake booster vacuum hose.
21. Disconnect purge valve connection.
22. Disconnect air intake to throttle body and remove entire air cleaner assembly.
23. Disconnect fuel lines using special tool, as outlined in Section 310-00.
24. Disconnect the power steering pressure (PSP) sensor.
25. Remove the bolts and position the power steering pump out of the way.

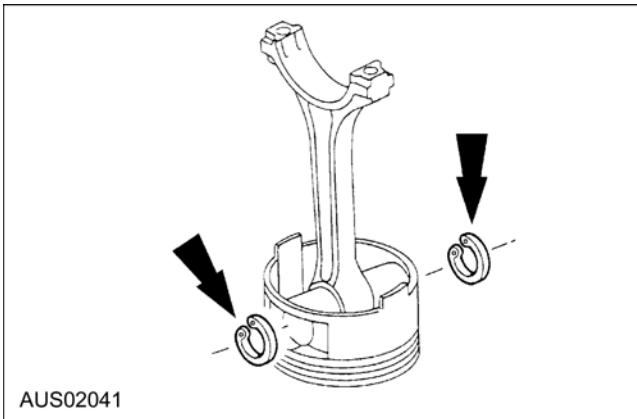


**DISASSEMBLY AND ASSEMBLY OF SUBASSEMBLIES (Continued)**

3. Install the piston pin in the piston and connecting rod assembly.



4. Install the piston pin retaining clips in the piston.  
**NOTE:** If replacing cylinder rings please use 15W-40 SAE Mineral Oil for 15,000kms to bed in rings.



**Cylinder Head RH and LH**

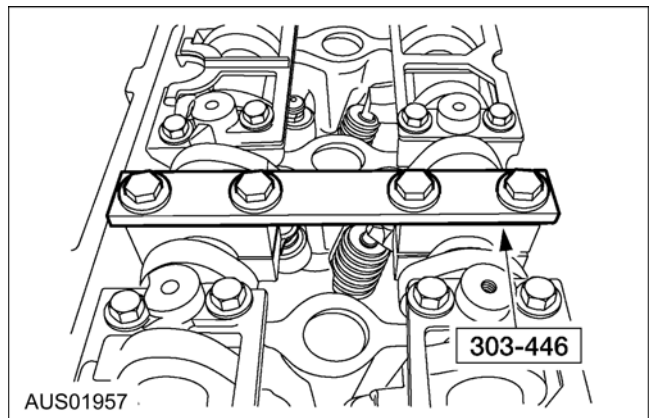
Special Tool(s)	
<p>SST303-567</p>	<p>Compressor, Valve Spring 303-567 (T97P-6565-AH)</p>
<p>SST303-452</p>	<p>Compressor, Valve Spring 303-452 (T93P-6565-AR)</p>

Special Tool(s)	
<p>SST303-446</p>	<p>Holding Tool, Camshaft 303-446 (T93P-6256-AHR)</p>
<p>SST303-383</p>	<p>Installer, Valve Stem Oil Seal 303-383 (T91P-6571-A)</p>
<p>SST303-382</p>	<p>Compressor Spacer, Valve Spring 303-382 (T91P-6565-AH)</p>

**Disassembly**

1. Install the special tool.

**⚠ CAUTION:** Before disassembly begins, mark the valve position on the face of each valve being removed. The valves must be installed in their original positions.



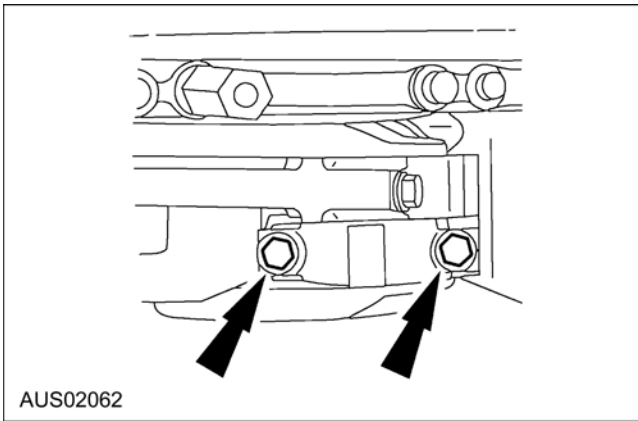
**ASSEMBLY (Continued)**

16. Install the rod bearing caps and tighten the bolts in three stages:

- Stage 1: Tighten to 25 Nm (18 lb-ft).
- Stage 2: Tighten to 45 Nm (30 lb-ft).
- Stage 3: Tighten an additional 90 degrees.

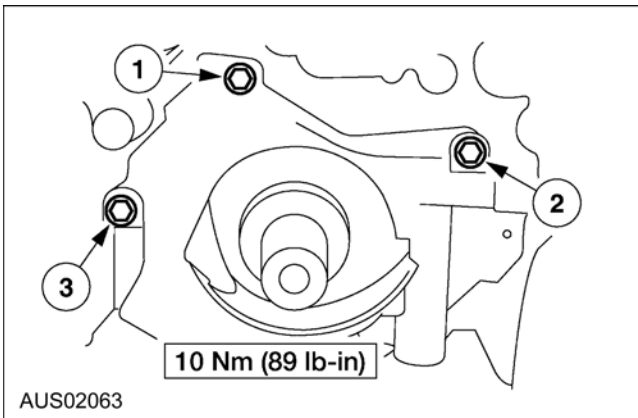
**⚠ CAUTION:** The rod bearing caps must keep the same orientation as marked during disassembly.

**NOTE:** The rod bearing cap bolts are torque-to-yield. Install new bolts each time repaired.

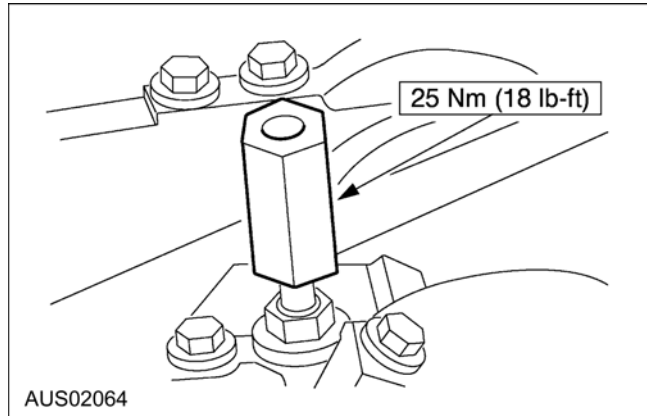


17. Install the piston connecting rod assemblies 3 and 5, 4 and 7, 2 and 8, by turning the crankshaft 90 degrees and repeating the previous steps.

18. Position the oil pump and gasket and install the bolts in the sequence shown.



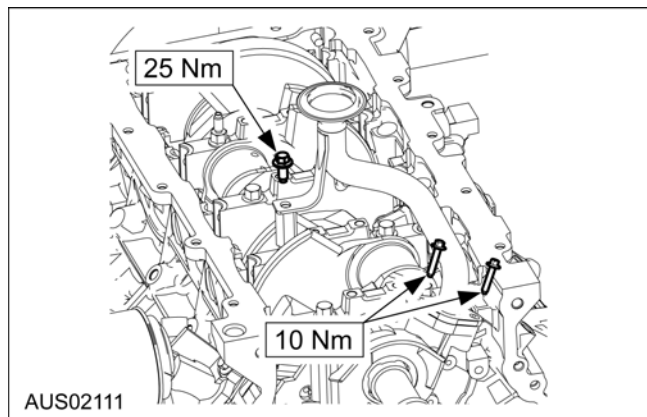
19. Install and tighten the oil pump screen and cover spacer.



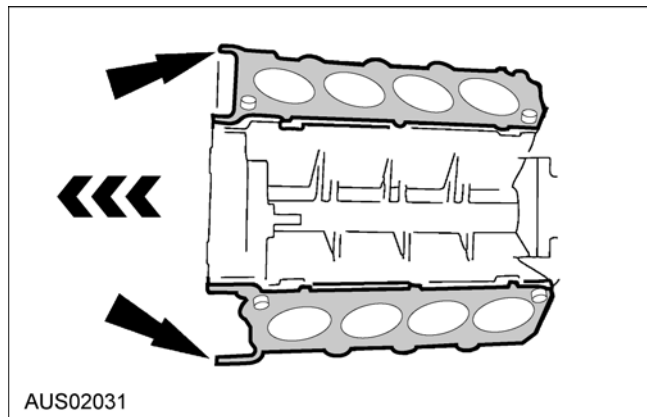
20. Install the oil pump screen cover and tube, and the bolts.

**⚠ CAUTION:** Make sure the O-ring is in place and not damaged. A missing or damaged O-ring can cause foam in the lubrication system, low oil pressure and severe engine damage.

**NOTE:** Clean and inspect the mating surfaces and install a new O-ring. Lubricate with clean engine oil.

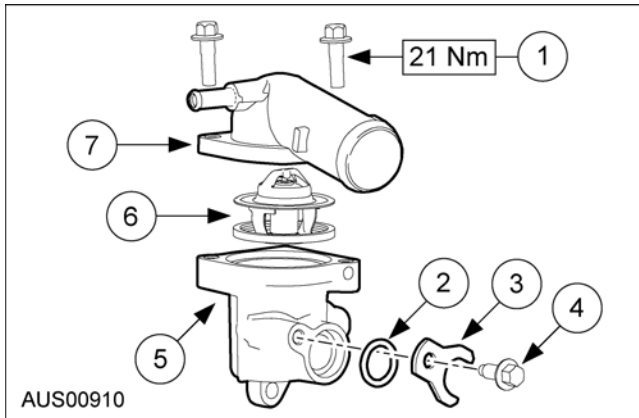


21. Install the cylinder head gaskets.



**REMOVAL AND INSTALLATION (Continued)**

- Remove the two bolts and separate the thermostat housing from the cylinder head.



Item	Description
1	Bolt
2	O-ring
3	Seal
4	Bolt
5	Housing
6	Thermostat
7	Conn Water outlet

- Clean and inspect the sealing surfaces after removing all traces of gasket material.
- Fit a new gasket and O-ring.
- To install, reverse the removal instructions.
- Refill and bleed the cooling system as previously described in this section.

**Water Pump - 6 Cylinder**

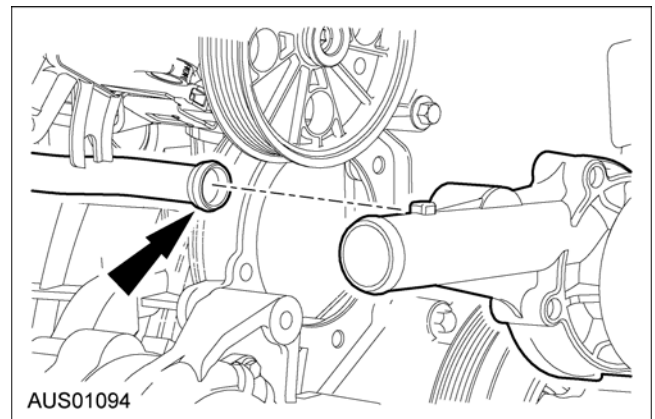
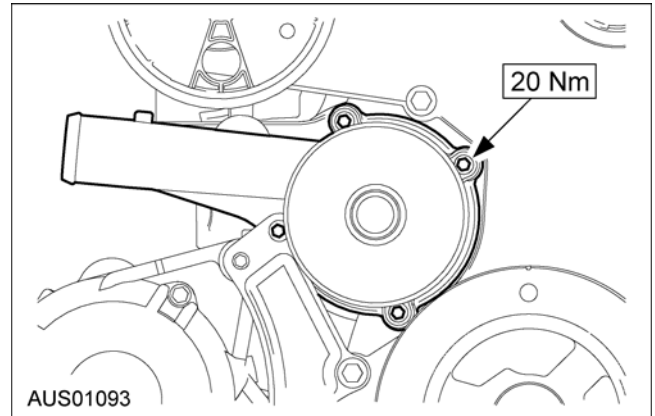
**Special Tool(s)**

<p>SST416-D001</p>	<p><b>Installer Power Steering Pump Pulley (6 &amp; 8 Cylinder)</b> 416-D001 (A7005)</p>
<p>SST888-000</p>	<p><b>Remover Power Steering Pump Pulley (6 &amp; 8 Cylinder)</b> 888-000 (A7185)</p>

**Removal**

- Drain the cooling system as described in Section 303-03a.

- Remove the accessory drive belt.
- Remove the water pump from the cylinder block being careful not to damage the heater pipe. This pipe is a slide fit with an 'O' ring seal.



- If necessary, the water pump pulley can be removed using 888-000.

**Installation**

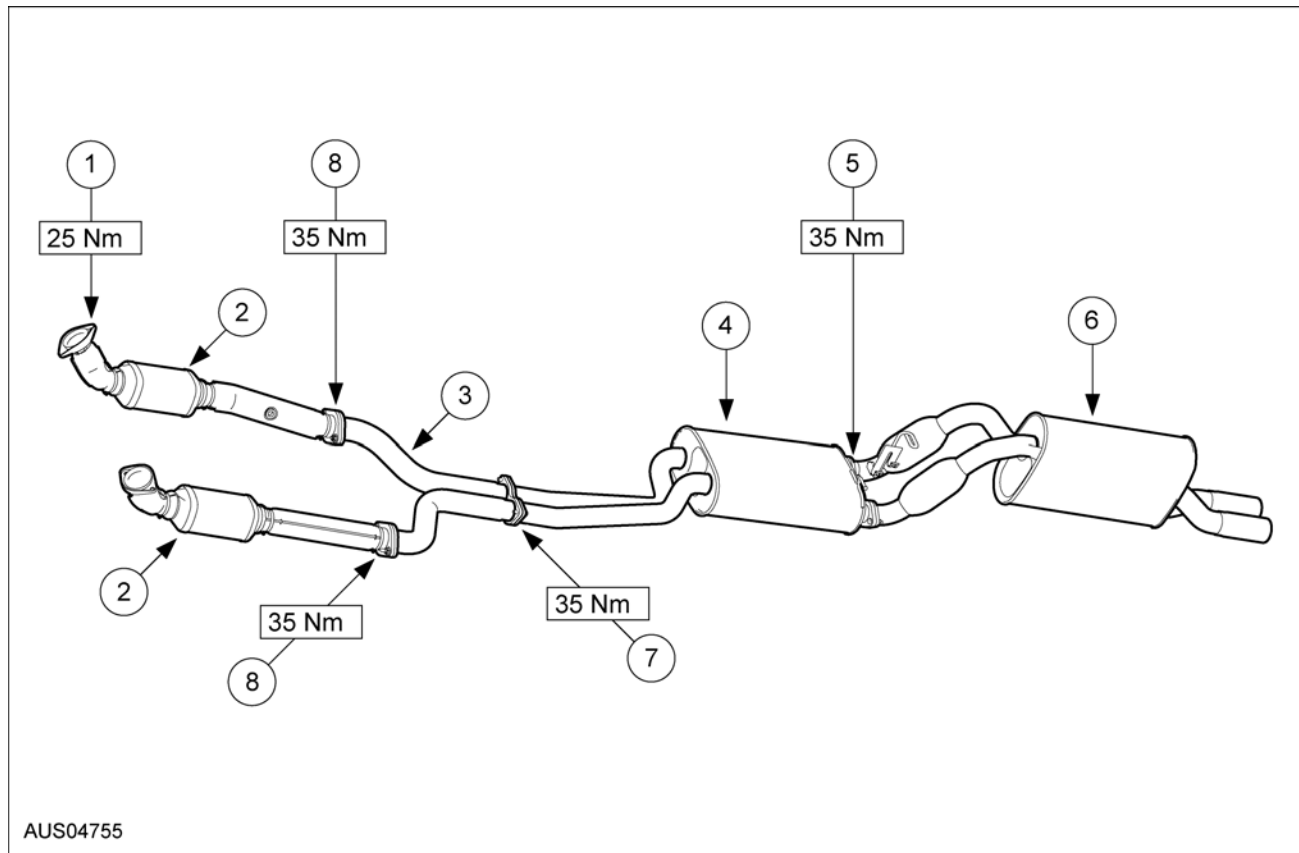
**NOTE:** If necessary, install the water pump pulley before installing the water pump, using 416-D001.

- Clean the heater outlet pipe and the matching opening in the water pump. Lubricate a new 'O' ring seal and install on the heater pipe.
- Clean the pump and cylinder block mating surfaces and install a new gasket coated with water resistant sealer.
- Position the water pump on the cylinder block and heater pipe. Install the bolts and lock washers.
- Refit the lower radiator hose.
- Install the drive belt, refer to Section 303-03a.
- Fill the cooling system as described in Section 303-03a.

**NOTE:** All hardware must be correctly installed and tightened to the torque specified.

## REMOVAL AND INSTALLATION (Continued)

### Pursuit & Super Pursuit



Item	Description
1	M10 Nut assembly
2	Three-way catalytic converter
3	Y Pipe Assembly
4	Intermediate muffler assembly
5	Nut assembly
6	Rear muffler assembly
7	Nut Assembly
8	Nut Assembly

## DESCRIPTION AND OPERATION

### Operation

To determine when the alarm should arm and disarm, the control module monitors the central locking actuator motor wires, micro switch and indicators.

When the remote key pad is used to lock or unlock the vehicle, the BEM commands the door actuator to move the door lock mechanism, which in turn changes the state of the micro switch a short time later and flashes the indicators. In this scenario, the alarm will either arm or disarm, depending on the direction of travel of the actuator and indicator flashes.

Other monitored circuits are the sectors which will trigger the system. The boot release solenoid is also monitored to temporarily bypass the boot circuit. A noise maker (siren) and a bonnet switch are also incorporated into the system, and placed under the bonnet in the engine bay.

Various features of the alarm may be programmed on / off by performing a procedure which involves the use of the key pad and ignition (refer programming instructions).

### Component Layout

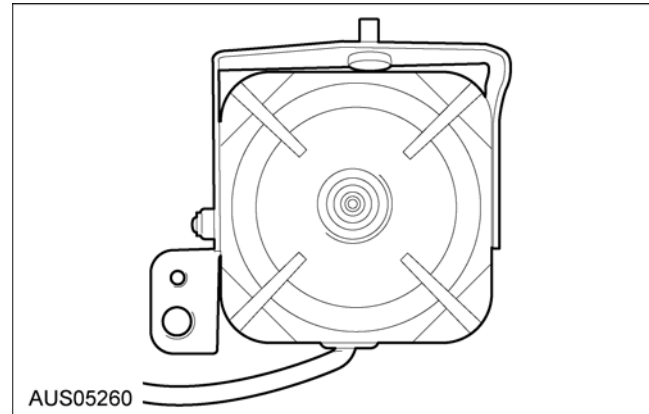
The alarm comprises of three main components.

#### 1. Wiring Loom

The alarm wiring loom is designed for a quick and easy installation. A 15 pin connector is used on one end of the wiring loom to connect to the alarm control module. Both kick trims house a 44 pin orange hybrid connector, which carries signals down each side of the vehicle. Connectors are used wherever possible to minimise errors during the fitment of the wiring loom. The alarm utilises these connection points. The left hand side utilises a "T-harness" to obtain its signals.

The right hand side uses five signals from the 44 pin connector, and therefore these five signal carrying wires are "backed-out" of their housing, and replaced with the terminals from the alarm wiring loom. 1 and 2 pin housings are used to connect these five circuits external to the 44 pin housing. The wiring loom also extends into the engine bay to provide connection points for the siren and bonnet switch.

#### 2. Siren

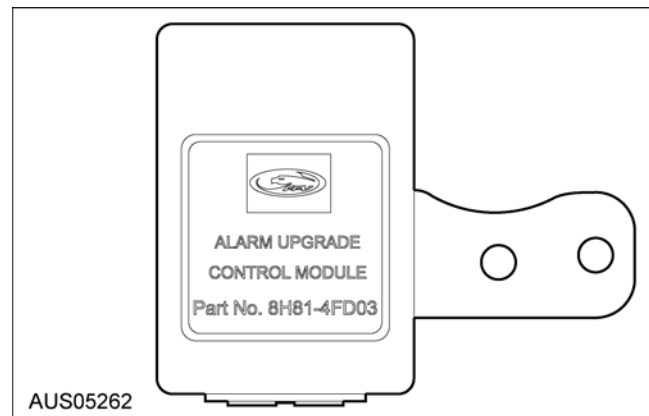


The siren (located next to the brake booster in the engine bay) has two main functions. The first is as a noise maker when the system arms, disarms, and triggers. The siren incorporates a battery backup to allow noise to be generated if either power is removed, or if the connector is unplugged. Ensure the system is disarmed, then turn ignition on before disconnecting power to the siren to prevent battery backup function operating.

The second function of the siren is the built in shock sensor. \*If a sufficient impact is received on the vehicle body, the alarm will trigger.

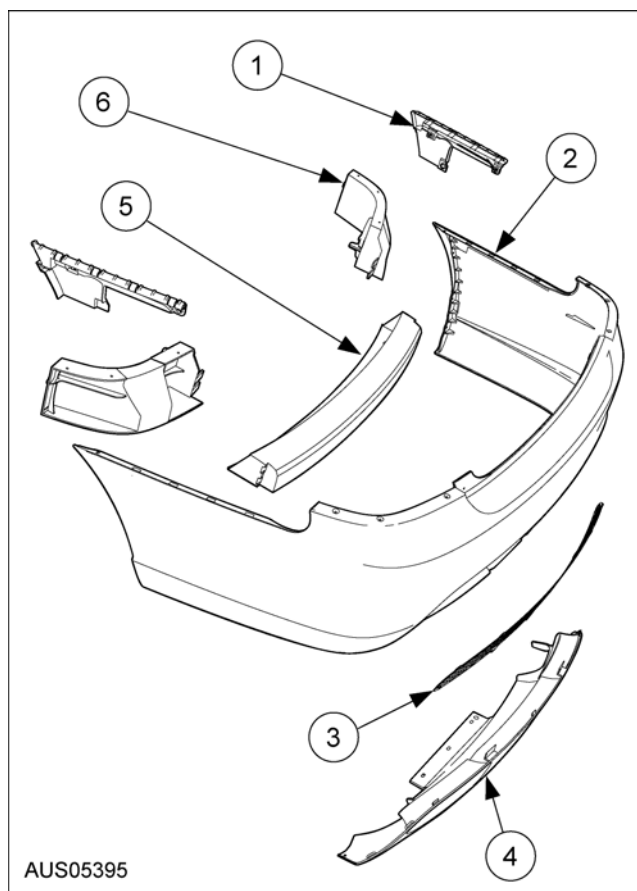
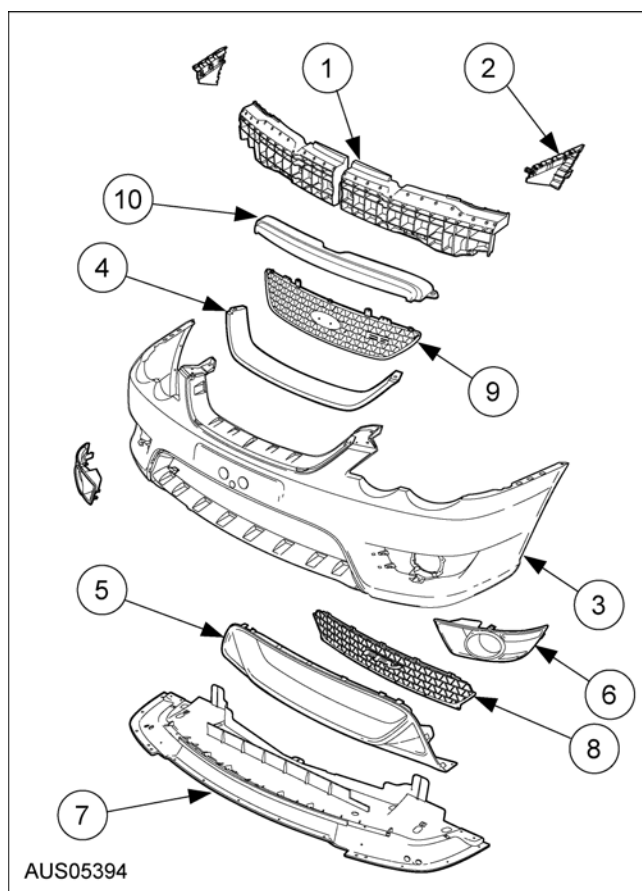
**NOTE:** Tilt or rocking of the vehicle will not trigger the alarm.

#### 3. Control Module



The control module (located above the left hand kick trim) monitors the central locking actuator motor, micro switch, indicators, ignition, boot, bonnet, and boot release. Outputs from the module control the siren and indicators.

**DESCRIPTION AND OPERATION (Continued)**



Item	Description
1	Front bumper absorber
2	Front bumper retainer
3	Front bumper cover (Polyurethane)
4	Front grille surround (Polypropylene)
5	Front lower Insert (Polypropylene)
6	Front fog light insert (ABS)
7	Lower air deflector
8	Lower Mesh
9	Upper Mesh
10	Header Bar

Item	Description
1	Rear bumper arm
2	Rear bumper cover (Polyurethane)
3	Rear Mesh
4	Rear bumper insert (Polypropylene)
5	Rear bumper absorber
6	Rear bumper side retainer