DESCRIPTION AND OPERATION (Continued)

Exhaust Fumes

These contain asphyxiating, harmful and toxic chemicals and particles such as carbon oxides, nitrogen oxides, aldehydes, lead and aromatic hydrocarbons. Engines should be run only under conditions of adequate exhaust extraction or general ventilation and not in confined spaces.

Gasoline (petrol) engine

There may not be adequate warning of odour or of irritation before toxic or harmful effects arise. These may be immediate or delayed.

Diesel engine

Soot, discomfort and irritation usually give adequate warning of hazardous fume concentrations.

Fibre Insulation

See also Dusts.

Used in noise and sound insulation.

The fibrous nature of surfaces and cut edges can cause skin irritation. This is usually a physical and not a chemical effect.

Precautions should be taken to avoid excessive skin contact through careful organization of work practices and the use of gloves.

Fire

See also Welding, Foams, and Legal Aspects.

Many of the materials found on or associated with the repair of vehicles are highly flammable. Some give off toxic or harmful fumes if burnt.

Observe strict fire safety when storing and handling flammable materials or solvents, particularly near electrical equipment or welding processes.

Make sure, before using electrical or welding equipment, that there is no fire hazard present.

Have a suitable fire extinguisher available when using welding or heating equipment.

First Aid

Apart from meeting any legal requirements it is desirable for someone in the workshop to be trained in First Aid procedures.

Splashes in the eye should be flushed carefully with clean water for at least ten minutes.

Soiled skin should be washed with soap and water.

In case of cold burns, from alternative fuels, place affected area in cool to cold water.

Individuals affected by inhalation of gases and fumes should be removed to fresh air immediately. If effects persist, consult a doctor.

If liquids are swallowed inadvertently, consult a doctor giving him the information on the container or label. Do not induce vomiting unless this action is indicated on the label.

Fluoroelastomer

See Viton.

Foams - Polyurethane

See also Fire.

Used in sound and noise insulation. Cured foams used in seat and trim cushioning.

Follow manufacturers instructions.

Unreacted components are irritating and may be harmful to the skin and eyes. Wear gloves and goggles.

Individuals with chronic respiratory diseases, asthma, bronchial medical problems, or histories of allergic diseases should not work in or near uncured materials.

The components, vapours or spray mists can cause direct irritation, sensitivity reactions and may be toxic or harmful.

Vapours and spray mists must not be inhaled. These materials must be applied with adequate ventilation and respiratory protection. Do not remove the respirator immediately after spraying, wait until the vapour/mists have cleared.

Burning of the uncured components and the cured foams can generate toxic and harmful fumes. Smoking, naked flames or the use of electrical equipment during foaming operations and until vapours/mists have cleared should not be allowed. Any heat cutting of cured foams or partially cured foams should be conducted with extraction ventilation. See also the vehicle Body Repair Manual.

Freon

See Air Conditioning Refrigerant.

Fuels

See also, Fire, Legal Aspects, Chemicals and Solvents.

Avoid skin contact with fuel where possible. Should contact occur, wash the affected skin with soap and water.

Gasoline (Petrol)

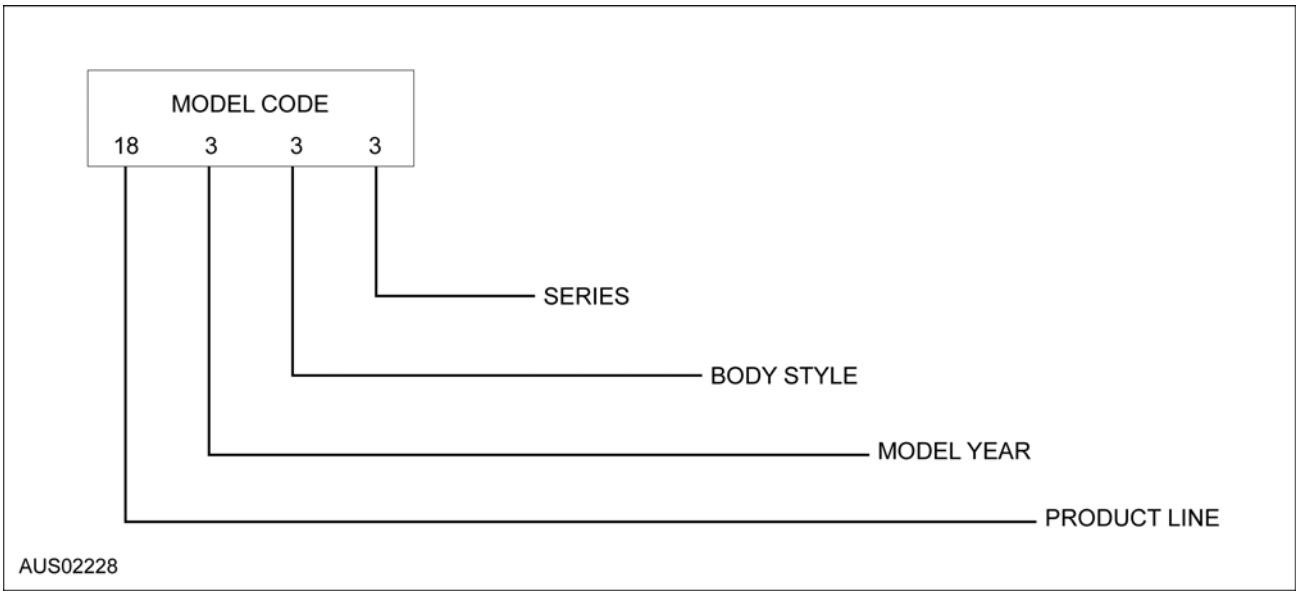
Highly flammable - observe No Smoking policy.

Swallowing can result in mouth and throat irritation and absorption from the stomach can result in drowsiness and unconsciousness. Small amounts can be fatal to children. Aspiration of liquid into the lungs, through vomiting, is a very serious hazard.

Gasolene dries the skin and can cause irritation and dermatitis on prolonged or repeated contact. Liquid in the eye causes severe smarting.

Motor gasolene may contain appreciable quantities of benzene, which is toxic upon inhalation, and the concentration of gasolene vapours must be kept very low. High concentrations will cause eye, nose and

DESCRIPTION AND OPERATION (Continued)



Paint Colour and Code

Name	Colour	Code
Winter White	(A1)	6SBA
Vixen	(VX)	6PNA
Luscious	(LS)	6BDA
Lightning Strike	(09)	6AWA
Vibe	(B4)	6CQA
Blue Pearl	(CP)	6AJA
Rapid	(RR)	6AVA
Silhouette	(ST)	632A
Shockwave	(W5)	6NJA
Icon introduction Feb 05’	(IB)	6AGA
Menace introduction May 05’	(NN)	6KRA
Kashmir introduction July05’ (only Falcon passenger not Falcon Ute)	(JV)	6CMA
Toxic introduction Aug 05’	(GT)	6TXA
Bionic introduction Sept 05’	(FF)	6CVA
Wired introduction Oct05’ (only Falcon passenger not Falcon Ute)	(HH)	6DWA
DeJaVu introduction Dec 05’	(PP)	6PTA
Fantasy introduction Nov 05’	(to be advised)	6DFA
Blaze	(KK)	6HTA
Victorian Taxi Yellow	44	
Taxi Orange	22	

Trim Colour and Code

Colour	Code
Stone	S1
Warm Charcoal	B1

Vehicle Compliance (VC) Label

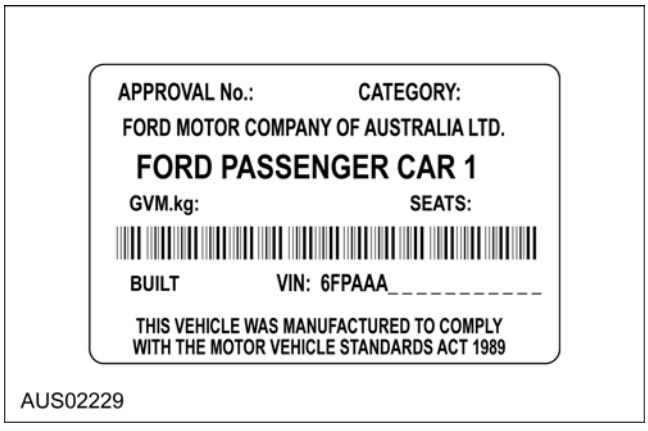
Australian Design Rules (A.D.R.) reuire vehicle manufacturere to comply with specific requirements regarding consumer, environment protection, and safety devices. A compliance plate is fitted to the vehicle and this contains codes which relate to specific design rules in effect at the time of vehicle manufacture.

Legiclation requires that no alteration be made to a vehicle that would result in the vehicle not complying with the Design Rules referred to on the compliance label of the vehicle.

Such Laws must be complied with at all times. Failure to do so may result in **Substantial Financial Penalties**. Where State/Territory Laws differ from the repair manual procedures, the Laws MUST take precedence.

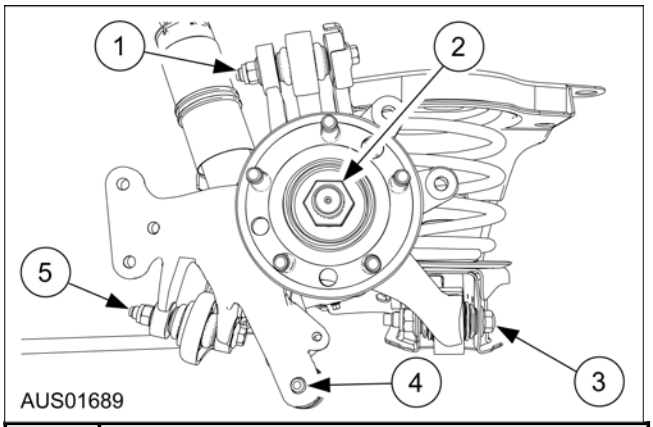
To ensure continuing compliance it is imperative that the engine/emission system is serviced according to the specified procedure. A typical compliance plate is shown below.

Compliance Plate (engine bay)



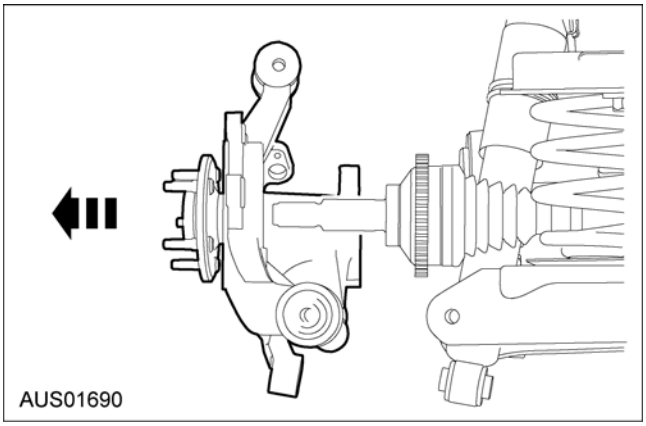
REMOVAL AND INSTALLATION (Continued)

12. Remove axle pac nut, UCA-knuckle bolt, FLCA-knuckle bolt and RLCA-knuckle bolt.



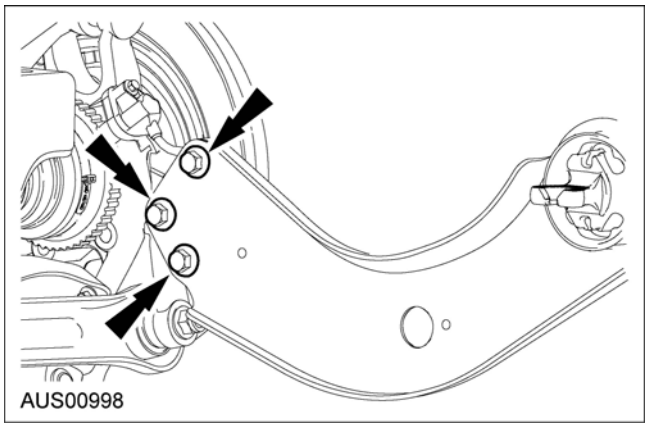
Item	Description
1	Upper Control Arm Nut and Bolt
2	Axle Pac Nut
3	Rear Lower Control Arm Nut and Bolt
4	Lower Shock Absorber Bolt
5	Front Lower Control Arm Nut and Bolt

13. Remove knuckle from halfshaft in a horizontal direction.
    NOTE: Knuckles must be removed in a direction parallel to the halfshafts to avoid damage to the teeth on the halfshaft and knuckle splines.
    NOTE: After removal of knuckle(s), the suspension may be extended from ride height, to allow springs to extend to uncompressed height. However, halfshafts and control arms must be adequately supported so that they remain horizontal.



Installation

1. Set the suspension to ride height. Refer to Section 204-00.
2. Position knuckle assembly over halfshaft (with halfshaft supported horizontally). Replace axle pac nut and torque to 50Nm.
3. Locate FLCA to knuckle using FLCA-knuckle bolt and nut.
4. a) Locate UCA to knuckle using UCA-knuckle bolt and nut.
   b) Insert Cam bolt into Cam slot on FPV knuckle.
5. Locate RLCA to knuckle using RLCA-knuckle bolt and nut.
   NOTE: This may require the adjustment of the spring height, via the jack attached to the RLCA, in order to position the RLCA groove over the knuckle.
6. Torque RLCA-knuckle nut to 140 ± 28 Nm.
7. Torque FLCA-knuckle bolt to 126 ± 24 Nm.
8. Torque UCA-knuckle bolt to 126 ± 24 Nm.
   NOTE: Torquing of bolts should be done with the vehicle at ride height.
   1. **FPV Vehicles** Adjust Camber on UCA-knuckle as required connection prior to the torque of the Cam bolt. For more information, see Section 204-00.
9. Secure wheel/hub to prevent halfshaft rotation when torquing axle nut.
10. Torque axle nuts to 325 ± 25 Nm.
11. Fit ABS sensor. See Section 206-09.
12. Fit abutment brackets.
13. Attach park brake cable to Banksia lever on knuckle.
14. Fit Control Blade to knuckle.



15. Replace wheels. Release jack supporting the suspension and slowly lower vehicle weight onto the wheels.

Rear Lower Control Arm (RLCA) park brake cable bracket

Removal

1. Hoist vehicle (Refer to section 100-02) to obtain access to IRS module.

General Procedures

Power Steering System Bleeding Air

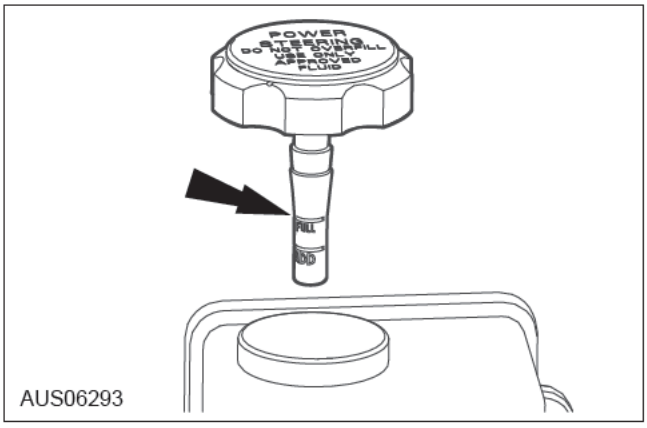
caution: ⚠ you should bleed the steering system after any component replacement or after disconnecting fluid line in case of steering system noise. bleeding is important to prevent pump damage, to ensure proper system operation and to stop steering system noise.

note : Inspect the steering system. Check and correct as needed:

- Hoses must not touch any other part of the vehicle. Hose touching frame, body or engine could cause steering system noise.
- All hose connections must be tight. Loose connections might not leak but could allow air into the system.

note : Use only clean, new power steering fluid. Fluid must be Mobil 424 or equivalent.

1. Switch ignition off.
2. Raise front wheels of the ground.
3. Turn the steering wheel full left.
4. Fill the fluid reservoir to “FULL” level. Leave the cap off.



5. With an assistant checking the fluid level and condition, turn the steering wheel lock-to-lock at least 20 times. Engine remains off.

   note : On system with long return lines or fluid coolers, turn the steering wheel lock-to-lock at least 40 times.

   note : Trapped air may cause fluid to overflow. Thoroughly clean any spilled fluid to allow for leak check.

   note : Keep the fluid level at “FULL”.

6. While turning the steering wheel, check the fluid constantly.

   note : No bubbles are allowed.

   note : For any signs of bublbles, recheck connections. Repeat step 5.

7. Start the engine. With the engine idling, maintain the fluid level. Reinstall cap.
8. Return wheels to centre. Lower the front wheels to the ground.
9. Keep the engine running for two minutes.
10. Turn the steering wheel in both directions.
11. Verify the following:
    - Smooth power assist
    - Noiseless operation
    - Proper fluid level
    - No system leaks
    - Proper fluid condition (i.e. No bubbles, no foam and no discolouration)
12. If all proper conditions apply, procedure is complete.
13. If any problem remains,check these special conditions:
    - Fluid: If there is foam or bubbles in the fluid. The fluid must be complete free of bubbles. In step 5, alert to periodic bubbles that could indicate a loose connection or leaky O-ring seal either in the return line hose or pressure hose. Also check for discoloured fluid. Follow the following steps to remedy the situation:
      - Switch the ignition off.
      - Wait two minutes.
      - Recheck the hose connections.
      - Repeat steps 7 - 10 of the procedure.
      - If the condition still exists then check: return hose clamps, return hose O-ring, pressure hose O-ring and gear cylinder line O-ring.
    - Noise: If the pump whines or groans then with engine running, recheck hoses for possible contact with the frame, body or engine. If no contact is found, follow either of the below methods:
      - Method 1: Normal cool down
        - Switch engine off.
        - Wait for the system to cool.
        - Install the reservoir cap.
      - Method 2: Partial fluid replacement
        - Switch engine off.
        - Use a suction device to remove fluid from the reservior.
        - Refill with cool, clean fluid.
        - Install the reservior cap.

IN-VEHICLE REPAIR (Continued)

Engine Mounting

1. Mount the engine on an engine rollover stand.

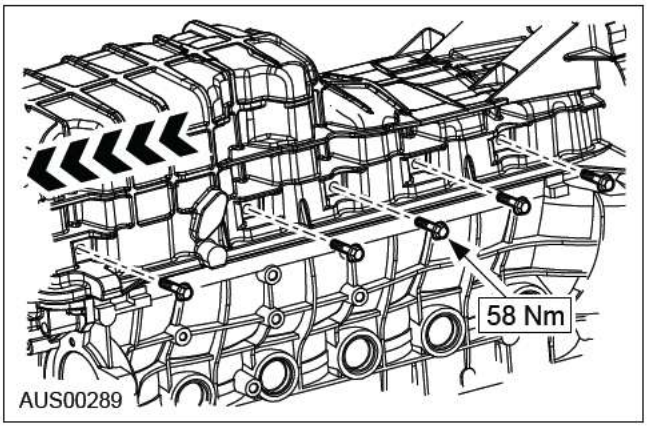
WARNING

Self-locking brake system of the engine stand may not be effective when the engine is held in an unbalanced position. This could lead to sudden, rapid movement of the engine and mounting stand handle and cause serious injury. Never keep the engine in an unbalanced position, and always hold the rotating handle firmly when turning the engine.

Engine Oil Pan

Removal

1. Raise the vehicle. For additional information, refer to section 100-02 of the 2008.0 Falcon Workshop Manual.
2. Remove the main bearing cross bolts.



Note: There are 5 main bearing cross bolts on the right hand side and 4 on the left hand side of the oil pan.

3. Remove the oil pan flange bolts.

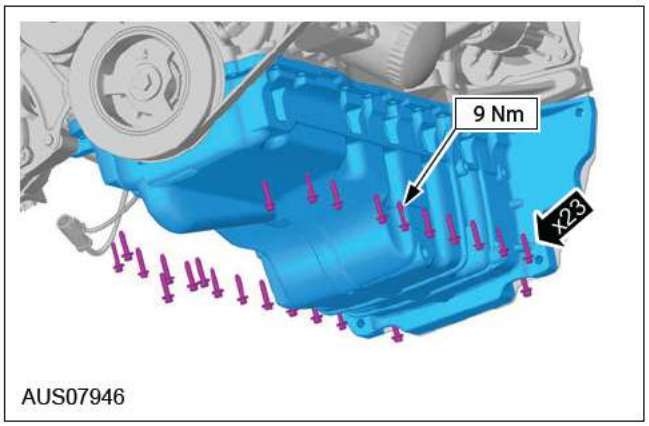
Note: The 23 oil pan flange bolts are slightly longer than the bearing cross bolts. Store them separately when removed.

Note: Only 12 right hand side pan flange bolts are shown. There are a further 11 on left hand side.

4. Remove the oil pan seal. To do so use a suitable tool to lever out each corner of the oil pan to break the seal.

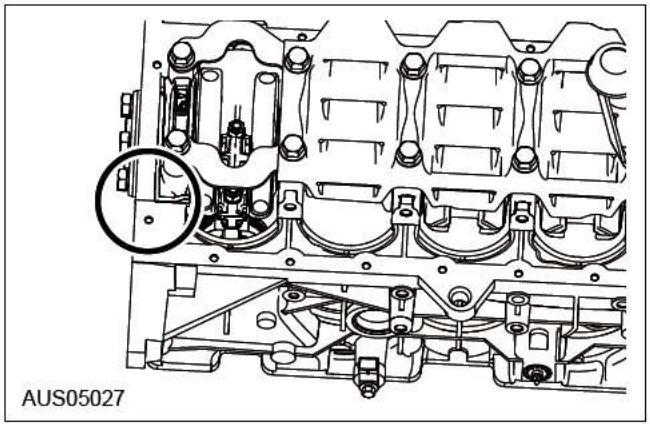
Note: Take care not to damage the sealing surface of the oil pan.

5. Remove the oil pan.

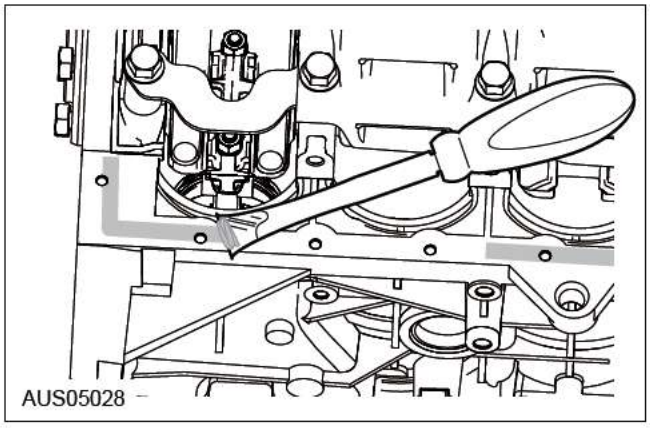


Installation

1. Clean block and sump contact surfaces. To do so wipe off excess oil. (Particular note should be given to the area circled in red to the left).



2. Use a scraper to remove the bulk of the silicon material, ensure none of this material enters the engine.

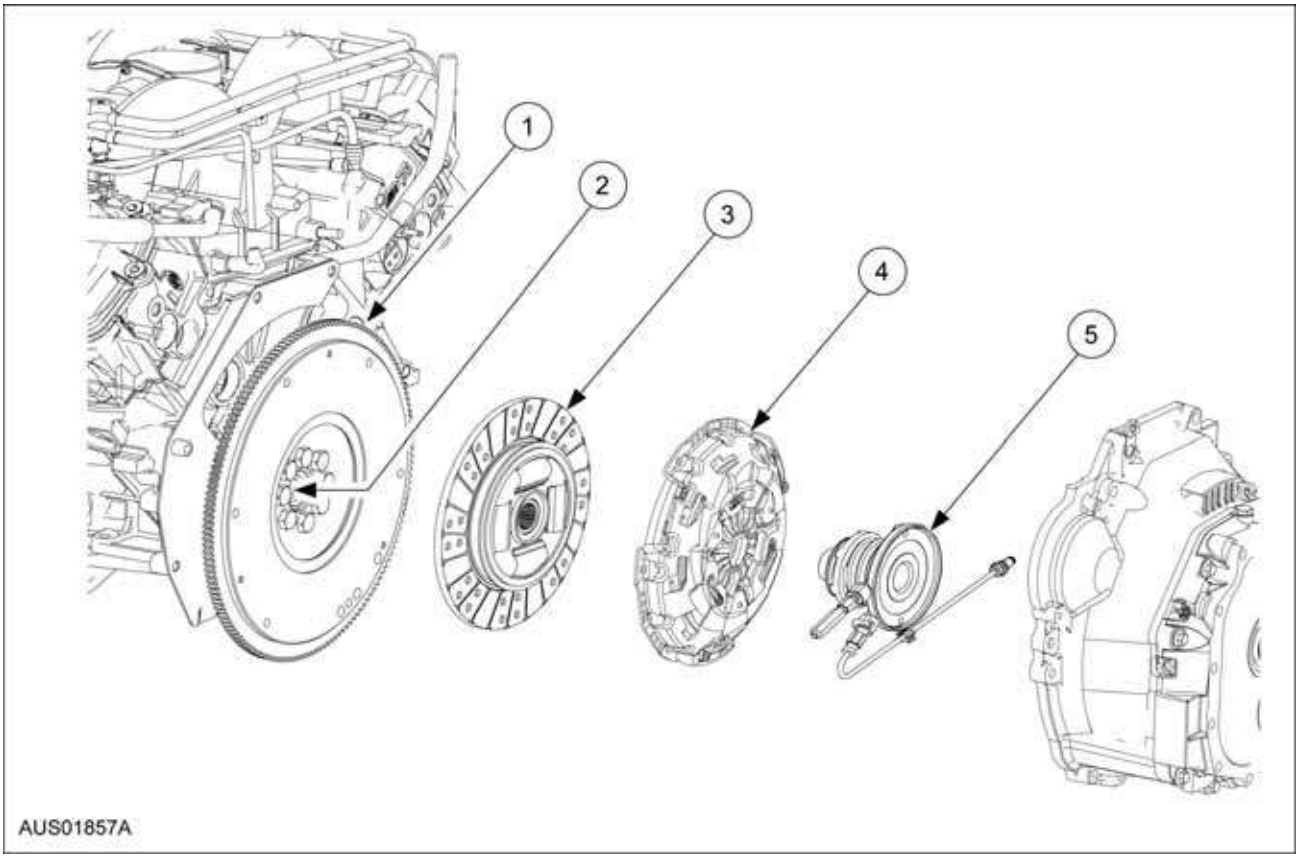


DIAGNOSIS AND TESTING (Continued)

Catalytic Converter	An in-line exhaust system device used to reduce the level of engine exhaust emissions
CD1..8	Acronym for Coil Driver. The PCM's Coil On Plug output drivers.
CHT	Acronym for Cylinder Head Temperature sensor.
Circuit	A complete electrical path or channel, usually includes the source of electrical energy. Circuit may also describe the electrical path between two or more components. May also be used with fluids, air or liquids
CKP	Acronym for Crankshaft Position Sensor
Closed Loop	A control system that uses a signal from an oxygen sensor mounted in the exhaust system to control the ratio of air and fuel provided to the engine. Also known as the Lambda loop
Clutch	A mechanical device that uses mechanical, magnetic or friction type connections to facilitate engaging or disengaging of two shafts or rotating members
CMP	Acronym for Camshaft Position. Indicates camshaft position. Provides camshaft position information for fuel injection synchronisation
CO	Carbon Monoxide. A colourless, odourless, gas toxic gas formed by combustion within the cylinder
CO2	Carbon Dioxide. A colourless, odourless, incombustible gas formed during combustion
Coil	A device consisting of windings of conductors around an iron core, designed to increase the voltage and for use in a spark ignition system
Continuous Memory	The portion of KAM used to store DTCs generated during Continuous Memory Self-Test
Continuous Memory Self-Test	A continuous test of the EEC system conducted by the PCM whenever the vehicle is operating
Control	A means or a device to direct and regulate a process or guide the operation of a machine, apparatus system
Coolant	A fluid used for heat transfer. Coolants usually contain additives such as rust inhibitors and antifreeze
Crankshaft	The part of an engine that converts the reciprocating motion of the pistons to rotary motion
Data	General term for information, usually represented by numbers, letters, or symbols
Digital	Digital signals have only one of two values, either on or off. Some systems measure the duration between the on and off signals to determine a value. The vehicle speed sensor (VSS)is produces a digital signal
DLC	Acronym for Data Link Connector. Connector providing access and/or control of the vehicle information, operating conditions, and diagnostic information
DTC	Acronym for Diagnostic Trouble
Code	An alpha/numeric identifier for a fault condition identified by the On-Board Diagnostic System
EDF1	Acronym for Electro Drive Fan 1. Controls the engine cooling fans at low Speed
EDF2	Acronym for Electro Drive Fan 2. Controls the engine cooling fans at high Speed
EMC	Acronym for Electro-Magnetic Compatibility
Engine	A machine designed to convert thermal energy into mechanical energy to produce force or motion
EOT	Acronym for Engine Oil Temperature
ETB	Acronym for Electronic Throttle Body
ETC	Acronym for Electronic Throttle Control.
ETCN	Acronym for Electronic Throttle Control Negative. The negative of the ETC motor.
ETCP	Acronym for Electronic Throttle Control Positive. The positive of the ETC motor.
EVAP	Acronym for Evaporative Emission Evaporative Emission (EVAP) - A system to prevent fuel vapour from escaping into the atmosphere. Typically includes a charcoal canister to store fuel vapours

DESCRIPTION AND OPERATION (Continued)

Clutch System Components — V8



Item	Description
1	Flywheel
2	Transmission input shaft pilot bearing
3	Clutch disc
4	Clutch pressure plate
5	Clutch slave cylinder/clutch release hub and bearing

For All I6, I6 Turbo & V8 Clutches:

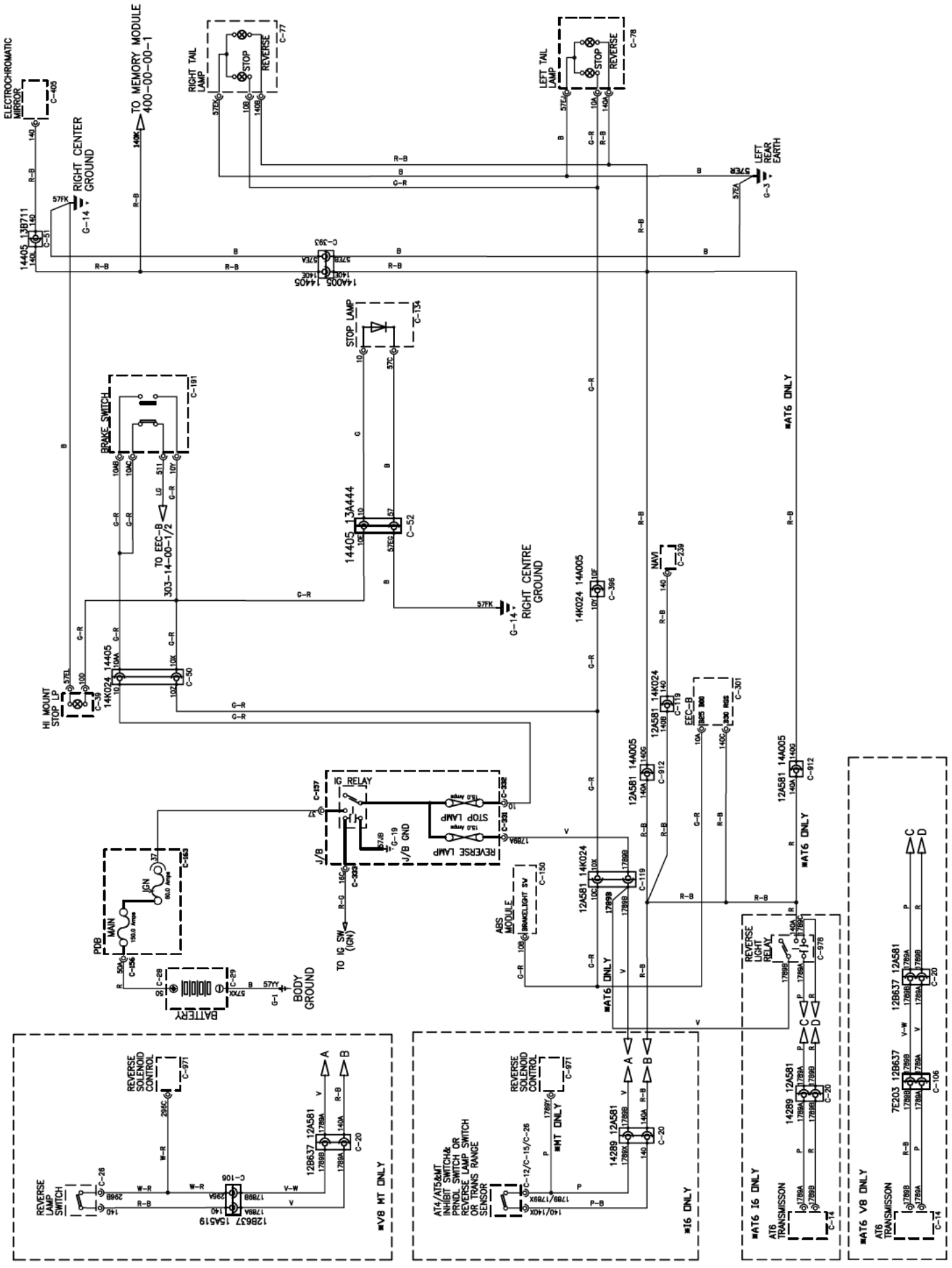
The clutch is a single plate, dry friction clutch disc with a self-adjusting, diaphragm-style spring clutch pressure plate.

The clutch operating mechanism consists of a clutch slave cylinder with an integral release bearing.

A pilot bearing located in the engine crank supports the end of the input shaft. The bearing should be lubricated when the clutch system is serviced.

NOTE: When a new clutch friction disc is installed, the clutch pressure plate should be adjusted (re-set) before installation (see Clutch Pressure Plate Adjustment Procedure). If a new clutch set (Friction Disc and Pressure Plate) is installed, this adjustment is not required as the pressure plate is correctly adjusted as manufactured.

NOTE: During clutch replacement, if the flywheel shows signs of overheating, scoring, or other damage, it should also be replaced.


ELECTROCHROMATIC MIRROR
TO MEMORY MODULE 400-00-00-1
RIGHT TAIL LAMP
LEFT TAIL LAMP
STOP
REVERSE
RIGHT CENTER GROUND
LEFT REAR EARTH
STOP LAMP
BRAKE SWITCH
TO EEC-B 303-14-00-1/2
RIGHT CENTRE GROUND
NAVI
HI MOUNT STOP LP
IG RELAY
STOP LAMP
REVERSE LAMP
J/B
J/B GND
IGN
PDB
MAIN
BATTERY
BODY GROUND
TO IG SW (IGN)
ABS MODULE
BRAKELIGHT SW
REVERSE LIGHT RELAY
EEC-B
*AT6 DNLY
*AT6 I6 DNLY
*AT6 V8 DNLY
*V8 MT DNLY
*I6 DNLY
REVERSE SOLENOID CONTROL
REVERSE LAMP SWITCH
AT4/AT5&MT INHIBIT SWITCH& PRNDL SWITCH OR REVERSE LAMP SWITCH OR TRANS RANGE SENSOR
AT6 TRANSMISSON

PINPOINT TEST I : INPUT FUNCTION — MODULE EEPROM MEMORY (SZ / DZ / HTR)	
NOTE: The setting of this DTC is due to incomplete calibration file download from PDS/IDS scan tool to HIM. Care must be taken to ensure that the HIM calibration file is successfully completed before replacing the HIM. Disturbances to vehicle battery power or the serial CAN bus can interfere with the process. In the event of repeated unsuccessful file download, the HIM has a basic backup of all data stored in the HIM microprocessor Read Only Memory (ROM). The HIM microprocessor will use the back up data to provide full HVAC system functionality but may have some degree of noticeable changes to the Climate Control system operating performance. Both the ROM backup and EEprom calibration data is utilised by all three HIM variants, namely ACC, MCC and HTR. A PID “CAL_VRAM” is provided to perform a check to determine which calibration data is loaded to RAM and being used by the HIM microprocessor. **For Example:** The Basic backup calibration data stored in the HIM ROM version is = 8. The HIM Calibration file data stored in the HIM EEprom version is = 9, or the same number as your current calibration file version. Using PDS/IDS scan tool, request the data for PID “CAL_VRAM” from the HIM. If the data returned is = 8 Then the HIM microprocessor has loaded the Basic backup calibration data to RAM due to a fault in the EEprom calibration data area.	
It is safe to operate the vehicle in the event of EEprom Calibration file download failure. If the data returned for PID “CAL_VRAM” is = 9 (or the same number as your current calibration file version) Then the HIM microprocessor has loaded the updated EEprom calibration data to RAM and there is no problem. (IE. DTC B2141 will not be set.)	
NOTE: REFER to SYMPTOM CHART BEFORE PROCEEDING	
CONDITIONS	**DETAILS/RESULTS/ACTIONS**
I1 : MODULE CHECK - HIM SYSTEM CALIBRATION FILE DOWNLOAD	
	1 Run engine and ensure vehicle battery condition is of normal charge state.
	2 Refer to page 18 of 28 for the instructions on “HIM configuration”
	3 Carry out “On demand self test to set the mode motors position end stops
	4 Check for any DTC’s set
	Are any DTC’s set?
	Yes
	Go to pin point tests for the particular DTC
	No
	System OK.

2. Troubleshooting

2-1 Carry out an On Demand Self Test

2-2 Carry out action according to DTC Chart recorded DTCs

2-3 Follow the Symptom Chart for issues not found during self test

Symptom Chart

No.	Condition	Possible Sources	Action
1	Sound can not be heard through standard 3.5mm input	* iPod is still connected * Damaged iPod cable * Internal fault * Volume in ACM settings is turned to minimum	* Standard audio input check
2	Sound can not be heard through iPod input or can not access iPod mode.	* iPod not connected correctly * Damaged iPod cable * Internal fault * Volume in ACM settings is turned to minimum	* iPod audio input check
3	Sound is heard through iPod input but limited or no controls are working	* Attached iPod does not support functions * Internal fault	* iPod controls check * refer to ACM
4	Attached iPod is not charging	* AIM in security lock mode * Low system voltage * Internal fault * Insecure connection	* iPod charging check

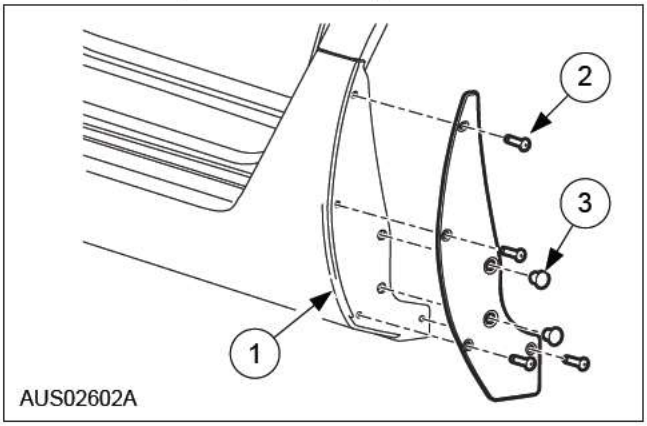
Service Procedures

Service Procedure	Description
Standard audio input check (Test A)	Steps required to confirm system is set up for standard audio input
iPod audio input and mode check (Test B)	Steps required to confirm system is set up for iPod audio input
iPod controls check (Test C)	Steps required to confirm that the system will control an attached iPod
iPod charging check (Test D)	Steps required to confirm that the system will charge an attached iPod

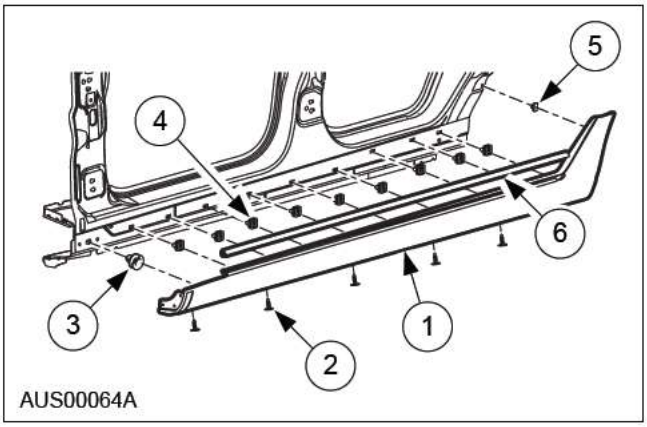
Rocker Panel Moulding - Sedan

Removal

1. Remove the front fender splash shield. For additional information, refer to 501-02.
2. Remove the scrivets and screws attaching rear of the rocker panel to the body.



3. Remove all rocker moulding seal clips from the top slots.
4. Remove fir trees from underneath the rocker (2 in the drawing below).



5. Remove rocker panel moulding.
   NOTE: Easiest to open the doors and pull from the front.

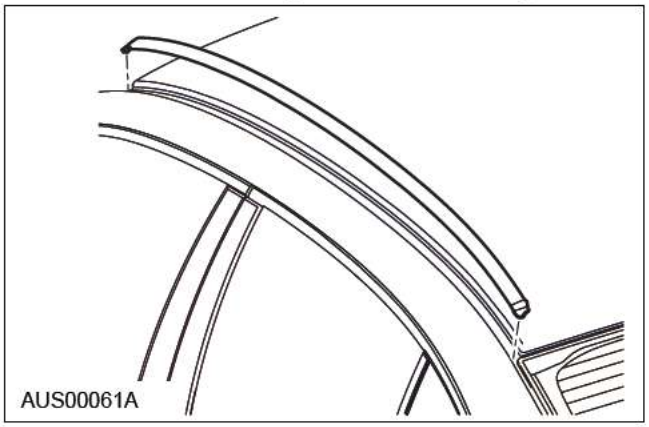
Installation

1. Locate rocker moulding lower fixing channel onto rocker panel weld seam.
2. Roll rocker panel in vertical position to locate rocker seal clips into corresponding top slots.
3. Fully insert all rocker moulding clips starting from the first front clip.
4. Ensure all clips are fully located home.
5. Fully insert the three fir tree clips on the underside, to the floor in corresponding holes.
6. Install the scrivets and screws attaching rear of the rocker panel to the body.
7. Install front splash shield. For addition information, refer to section 501-05.

Roof Ditch Moulding - Sedan

Removal

1. Remove the existing roof ditch moulding.



2. Use an adhesive cleaner to remove tape residue from the channel.

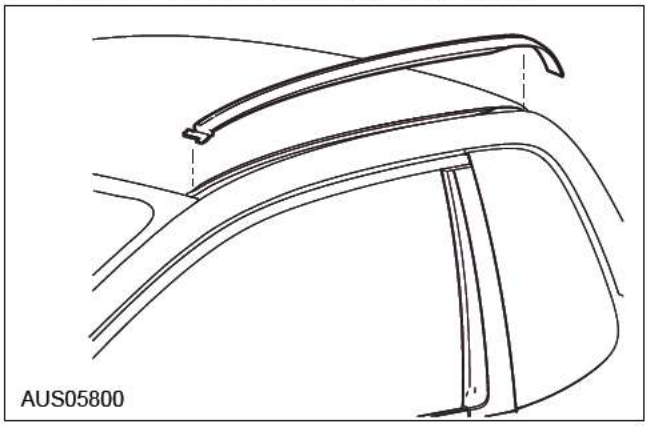
Installation

1. Remove the backing tape from the new moulding.
2. Align corner of moulding front tab underneath windscreen seal
3. Place body of moulding in channel, aligned to body side, gap at roof-side
4. Before completely adhering tape at rear of moulding, insert the tab at the rear of the moulding under the backlight seal.
5. Ensure uniform pressure is applied to moulding using a roller.

Roof Ditch Moulding - Ute

Removal

1. Remove the existing roof ditch moulding.



2. Use an adhesive cleaner to remove tape residue from the channel.

Installation

1. Remove the backing tape from the new moulding.
2. Align corner of moulding front tab underneath windscreen seal.

DESCRIPTION AND OPERATION (Continued)

Restraints Control Module (RCM)

WARNING: The restraints control module (RCM) orientation is critical for correct system operation. If a vehicle equipped with an airbag supplemental restraint system (SRS) has been involved in a collision in which the center tunnel area has been damaged, inspect the mounting and bracket for deformation. If damaged, the RCM must be replaced whether or not the airbags have deployed. In addition, make sure the area of the RCM mounting is restored to its original condition.

The RCM is mounted on the park-brake bracket welded on the centre tunnel between the front seats. The RCM carries out the following functions:

- deploys the airbag(s) in the event of a deployable crash.
- deploys the seat side airbag(s) in the event of a deployable crash (if equipped)
- deploys the side air curtain(s) in the event of a deployable crash (if equipped)
- activates the safety belt buckle pretensioners to remove slack from the safety belt.
- monitors the SRS for faults.
- requests the instrument cluster module to illuminate the restraints indicator lamp (RIL) if a fault is detected.
- requests the instrument cluster module to flash the RIL to indicate the lamp fault code (LFC) is detected.
- communicates through the data link connector (DLC) the current or historical Diagnostic Trouble Codes (DTCs).
- requests the instrument cluster module to activate a chime to remind the driver and the front passenger (if the passenger front seat mat sensor presence) to buckle up.
- requests the instrument cluster module to display a text message if the airbag indicator is not available and another SRS fault exists.
- records deployable and non-deployable impact data.

The RCM monitors the SRS for possible faults. If a fault is detected while the ignition switch is in the ON position, the RCM will illuminate the restraints indicator lamp (RIL) located in the instrument cluster.

When the ignition is cycled (turned off and then on), the restraints indicator lamp (RIL) will prove out by lighting for six seconds and then going out. If a SRS fault exists, the RIL will flash the 2-digit lamp fault code (LFC) three times, then it will remain illuminated for the rest of the key cycle. The RCM will also communicate the current and historical diagnostic trouble codes (DTCs) through the data link connector (DLC) using a diagnostic tool. If the RIL does not function, and the system detects a fault condition, the RCM will signal the instrument cluster module to display a text message. The text message is "AIRBAG LAMP FAULT". The SRS and the RIL require repair.

LFCs are prioritized. If two or more faults occur at the same time, the fault having the highest priority will be displayed. After that fault has been corrected, the next highest priority fault will be displayed.

The RCM includes a backup power supply. This feature provides sufficient backup power to deploy the airbags in the event that the ignition circuit is lost or damaged during impact. The backup power supply will deplete its stored energy approximately one minute after the battery ground cable is disconnected.

Electrical System

The electrical system that supports the airbag SRS:

- is powered from the battery through the ignition circuit.
- provides the electrical path from the restraints control module (RCM) to the SRS components.
- provides the electrical path from the RCM to the restraints indicator lamp (RIL).
- provides the electrical path from the RCM to the seatbelt warning indicator.
- provides the electrical path from the RCM to the data link connector (DLC).
- provides the electrical path from the RCM to the instrument cluster module.

High Speed Controller Area Network (HS-CAN)

This vehicle utilises a communication system called a high-speed controller area network (HS-CAN). The HS-CAN consisted of a twisted pair of wires. The following modules are linked to the HS_CAN communication network:

- restraints control module (RCM)
- instrument cluster (IC) module
- powertrain control module (PCM)
- body electronics module (BEM)
- HVAC integrated module (HIM)
- anti-lock brake system (ABS), traction control system (TCS) and dynamic stability control (DSC) system
- data link connector (DLC)

Refer to Section 418-00 for additional information

DESCRIPTION AND OPERATION

Water Leaks

General

- If water leaks occur after bodywork repairs, the cause can be established using the checks described below. A systematic and logical procedure is required to locate water leaks. Before beginning extensive checks, a thorough visual inspection must be carried out.
- Visual Inspection
  - The following characteristics may indicate existing leaks:
  - Check the clearance and accurate fit of ancillary components such as the hood, tailgate, doors, and so on.
  - Check for correct fit and possible damage to sealing elements such as blanking plugs, rubber door seals, and so on.
  - Check water drain holes for unhindered flow.
- Various tests can be used to provide further information on possible leaks:
  - Water test
  - Washer test
  - Road test
  - Test with UV lamp
  - Special mirror test
  - Chalk (powder) test
  - Flow tube (smoke) test

Practical execution of tests and checks

Water test

NOTE: Never aim a jet of water directly at a rubber seal.

- Carry out the water test with a second person present (passenger compartment).
- Use variable washer nozzles (concentrated water jet to fine spray mist).
- Start in the lower section and spray the whole area, working upwards in stages.
- The following are suitable for the water test:
  - softened water (liquid soap additive)

Automatic car wash

- Further tests can be carried out in the washer system.
- Some leaks originate here, or only occur here.
- The relevant passenger compartment should be checked using a torch during the wash procedure.

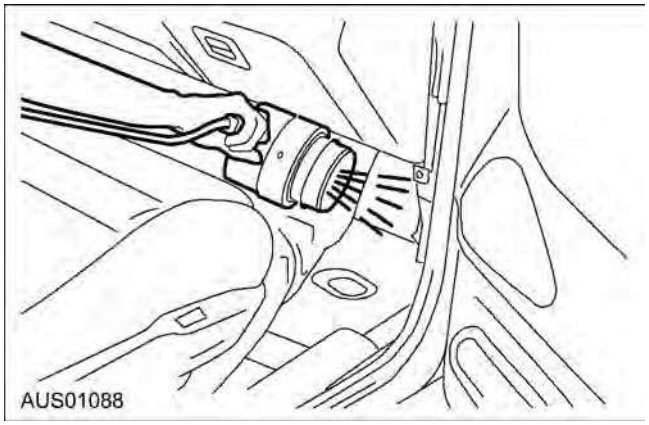
Road test

- If no leaks are located during the tests above, road tests should be carried out on wet roads.
- Road tests under various conditions:
  - At various speeds.
  - On various road surfaces.
  - With loaded or unloaded vehicle.
  - Driving through puddles (splash water).

Test with UV lamp

- Wet the test area with clear water from the outside.
- Prepare test liquid (see Owner's Handbook) and apply it from the outside using a suitable water sprayer.
- Illuminate the relevant area from the inside using the UV lamp.
- The test liquid will make the leak visible.

UV lamp



- Benefits of the UV lamp:
  - No need to dry out wet areas before the test.
  - The ingress of water and its subsequent path can be identified precisely.
  - No need to remove most ancillary components from the vehicle.

Mirror test

A mirror can be used to see into hard-to-reach areas.

Mirror

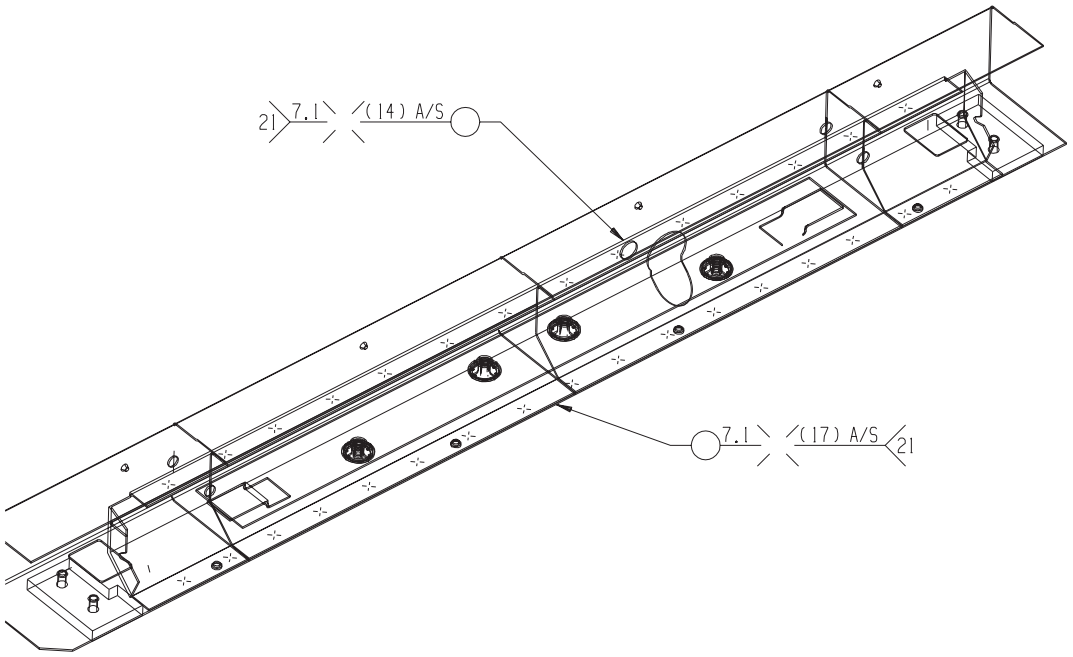
Benefits

- A switchable light built into the mirror area.
- The angle of inclination of the mirror can be set manually using the handle.
- The connector between the handle and the mirror is flexible.

Chalk test (Powder test)

- In this test, the clamping load and the bearing surface of the seal are checked.
- Performing the test:
  - Dust the sealing surface with chalk powder.
  - Slowly close the liftgate/door and open it again.

Ute - Rear Floor Cross Rear Sill Assembly 1



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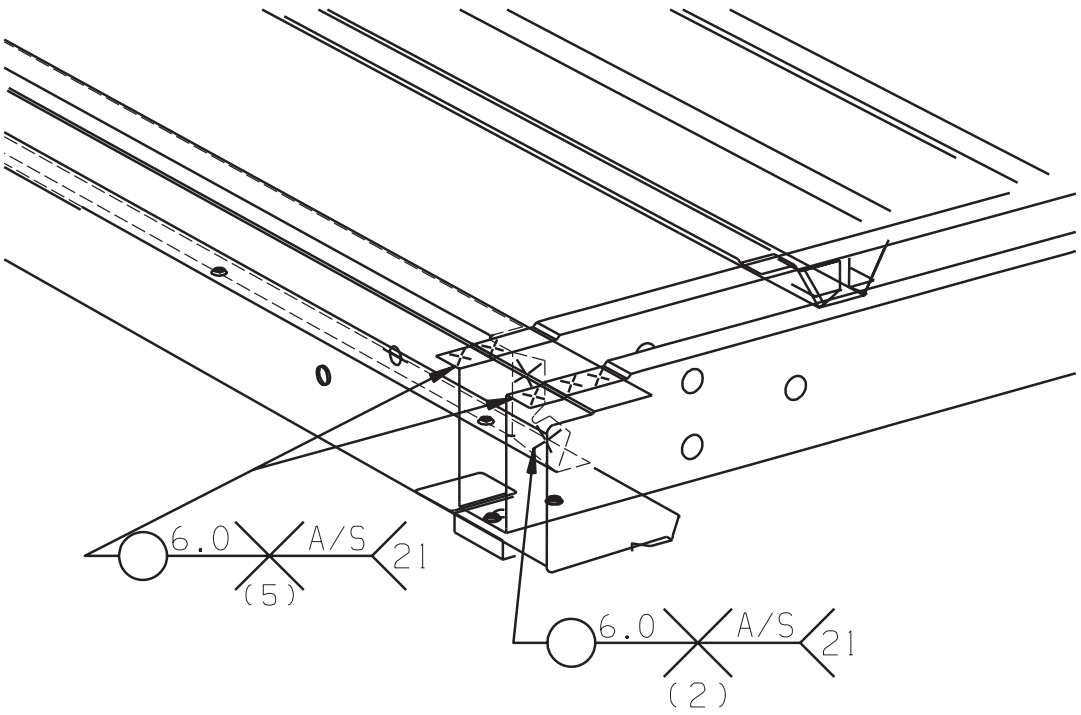
Ute - Rear Floor Cross Rear Sill Assembly 2



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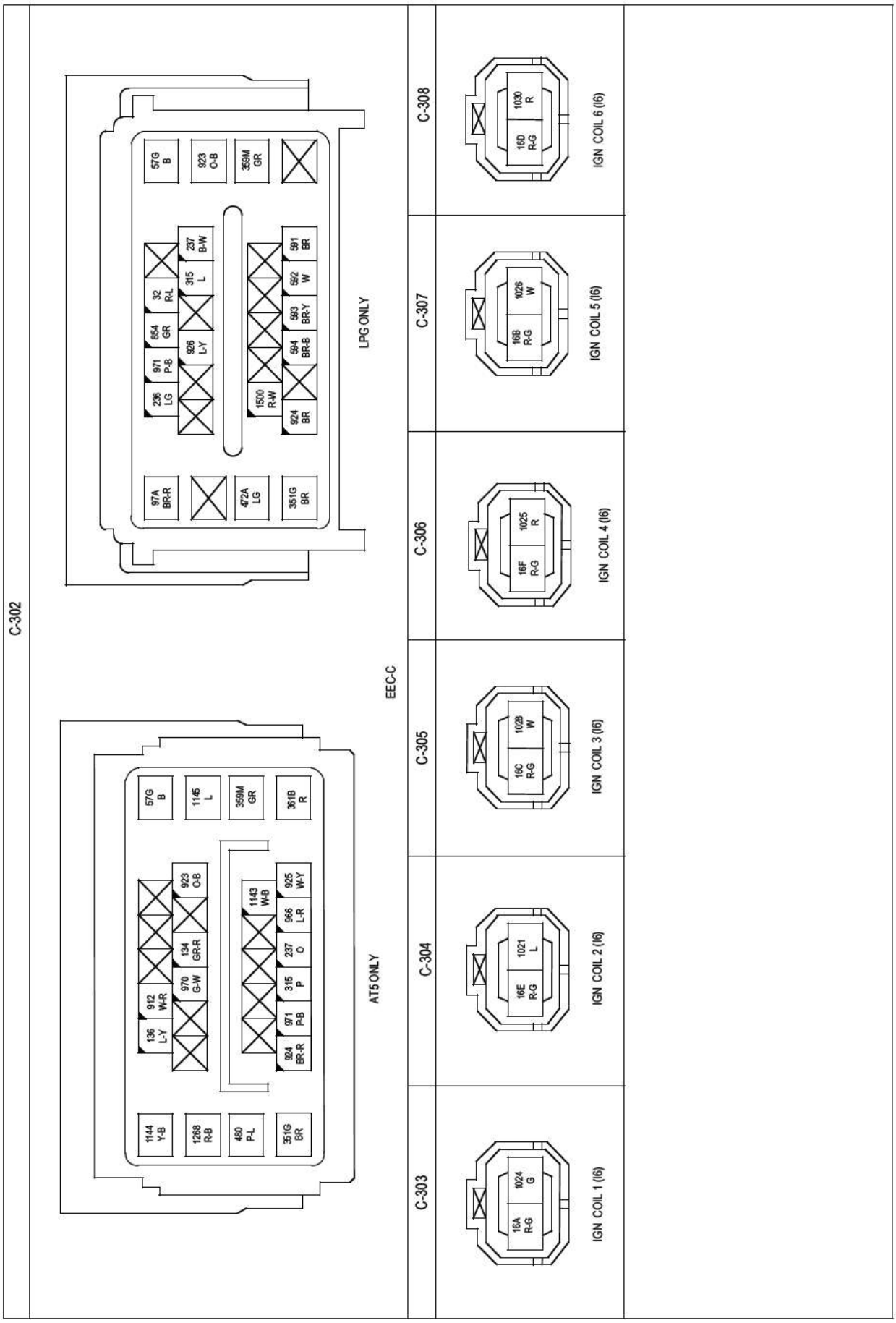
C-302
LPG ONLY
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923 O-B
359M GR
237 B-W
315 L
32 R-L
854 GR
926 L-Y
971 P-B
236 LG
1500 R-W
924 BR
591 BR
592 W
593 BR-Y
594 BR-B
97A BR-R
472A LG
351G BR
AT5 ONLY
57G B
1145 L
359M GR
351B R
923 O-B
925 W-Y
1143 W-B
966 L-R
237 O
134 GR-R
315 P
970 G-W
971 P-B
912 W-R
924 BR-R
136 L-Y
1144 Y-B
1268 R-B
480 P-L
351G BR
EEC-C
C-303
16A R-G
1024 G
IGN COIL 1 (I6)
C-304
16E R-G
1021 L
IGN COIL 2 (I6)
C-305
16C R-G
1028 W
IGN COIL 3 (I6)
C-306
16F R-G
1025 R
IGN COIL 4 (I6)
C-307
16B R-G
1026 W
IGN COIL 5 (I6)
C-308
16D R-G
1030 R
IGN COIL 6 (I6)