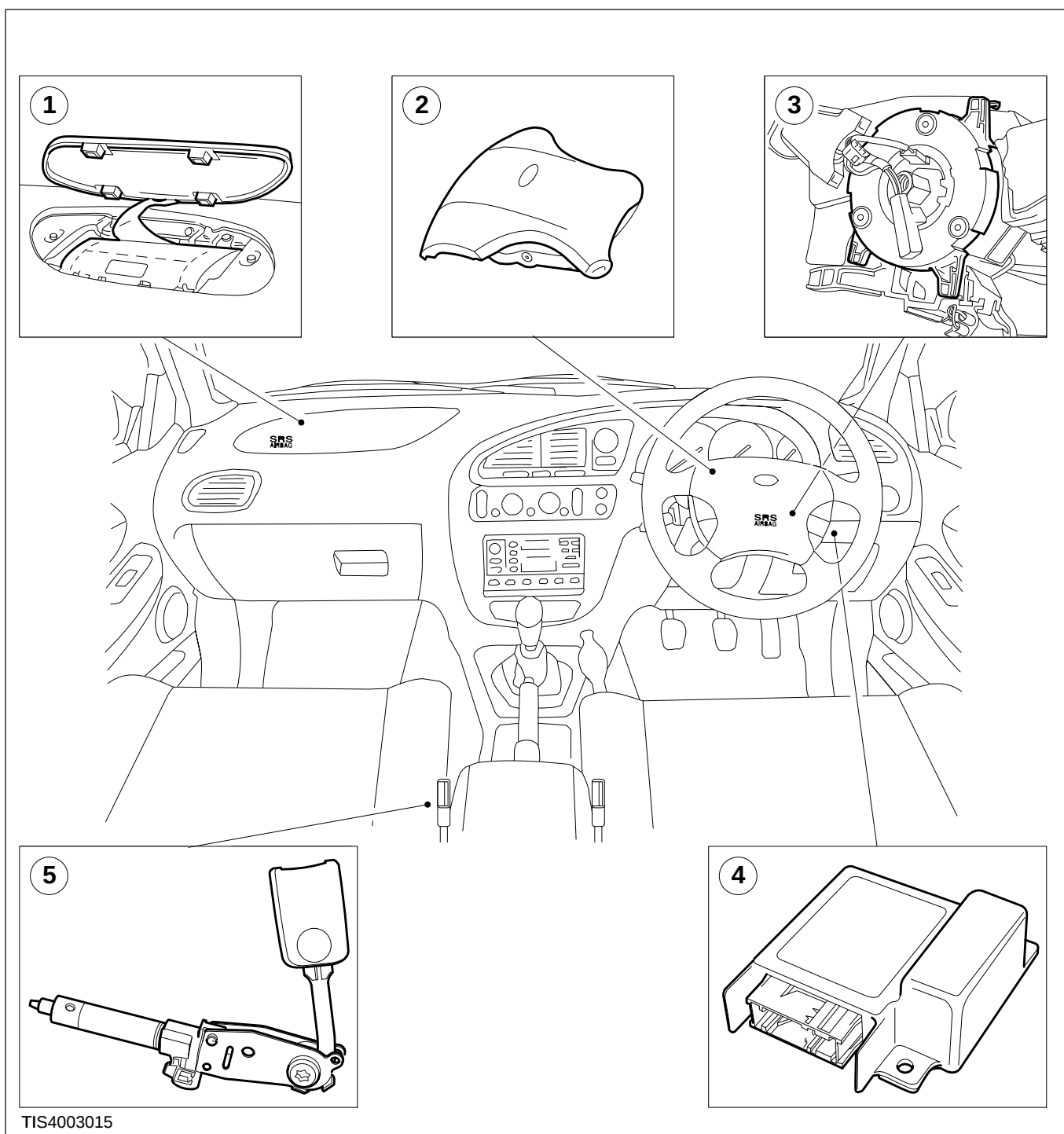


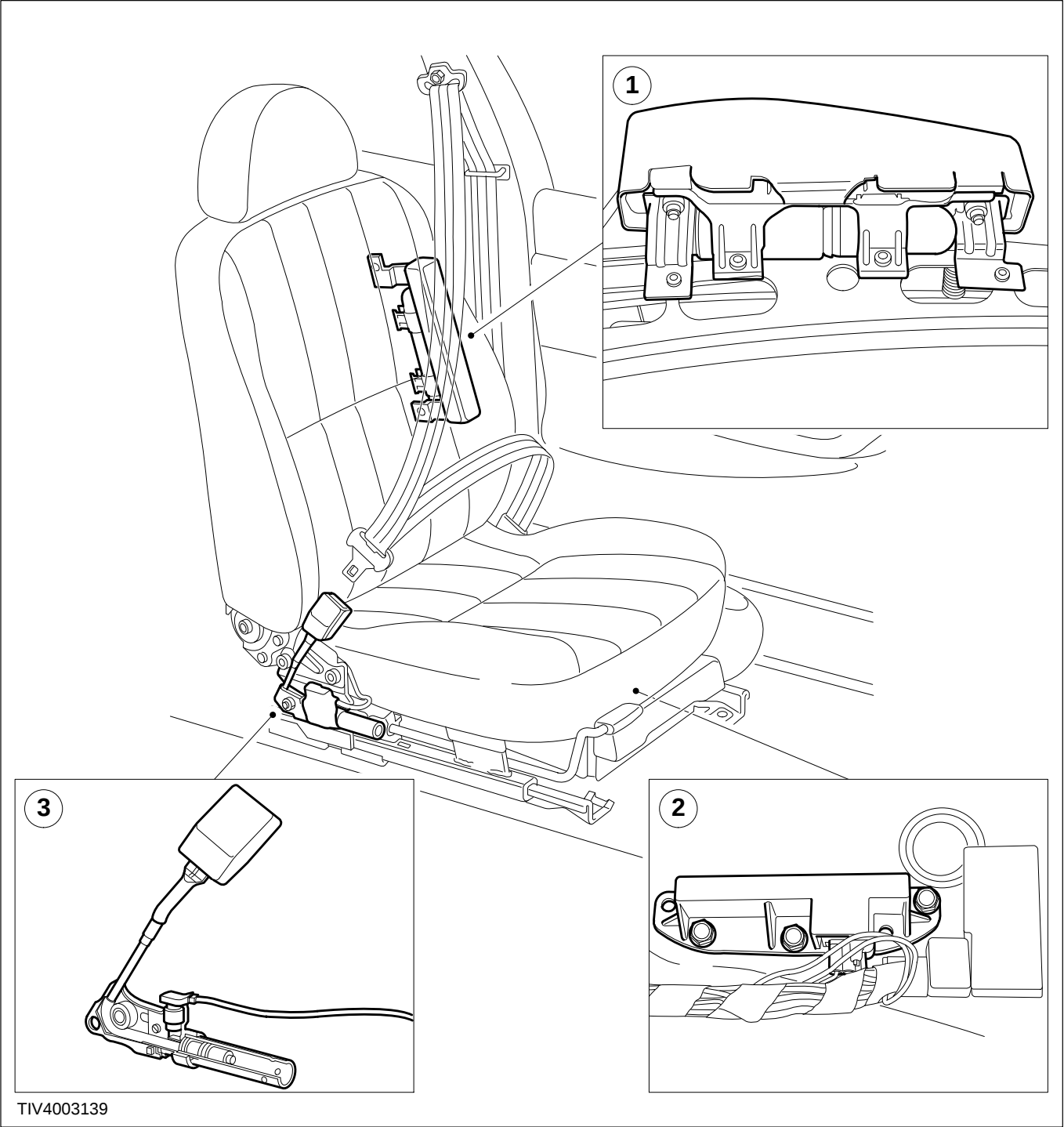
Description and Operation



Eurobag system overview

Item	Description
1	Passenger air bag module
2	Driver air bag module
3	Clockspring
4	Air bag control module
5	Seat belt pretensioner

The Scorpio '95 Supplementary Restraint System (SRS) is fitted as standard for the driver and optionally for the front seat passenger. This system is substantially different to that fitted to American Ford vehicles. The Supplementary Restraint System (SRS) has been specifically designed to protect the driver and passenger (when optional passenger air bag module is fitted), from sustaining severe facial and upper body injuries in the event of a serious impact. Optimum protection can only be ensured when used in conjunction with a conventional three point safety belt, the seat belts form an integral part of the Supplementary Restraint System (SRS).



Item	Description
1	Side air bag module
2	Side impact crash sensor
3	Pyrotechnic seat belt pretensioner

Vehicles equipped with side air bags can be identified by a label attached to the seat base side trim panel.

The visible VIN plate which shows the air bag symbol and either X1 or X2 dependant on the number of air bags fitted, attached to the windscreen edge of the instrument panel.



DTS4003020

⚠ WARNING: All vehicles fitted with the optional passenger air bag module fitted in production have a WARNING sticker attached to the facia crash pad. PROHIBITING the use of rear facing child or baby seats.

It is NOT possible under any circumstances to disable the passenger air bag module whilst maintaining the integrity of the whole system.

The system consists of the following components:

- Electronic control module
- Wiring loom
- Clockspring
- Warning indicator
- Air bag module(s)
- Pyrotechnic/Mechanical seat belt pre-tensioners.

The Air Bag Electronic Control Module (ABECM) governs the operation of the whole system, including the diagnostics element. It contains two sensors, a crash sensor and a safing sensor. The crash sensor produces a signal corresponding to the rate of deceleration. The safing sensor detects only deceleration. These two sensors are connected in series and if they both sense a deceleration in excess of a predetermined limit, the air bag control module will deploy the seat belt pre-tensioners and the air bag module(s). The system will always deploy the pre-tensioner before or at the same time as the air bag(s) and in that sequence only.

The air bag electronic control module also performs system checks. In the event of a fault being found the warning indicator is illuminated either constantly or intermittently. The behaviour of the warning indicator depends on the type of fault present. The warning indicator is located in the instrument cluster.

The wiring loom provides power to the electronic control module from the vehicle supply and hence to the air bag module(s) and warning indicator.

The clockspring is designed to carry signals between the electronic control module and the driver air bag module. The clockspring is fitted to the steering column switch mounting bracket and consists of fixed and moving parts connected by a coiled Mylar tape with integral conducting tracks. The Mylar tape is able to 'wind up' and 'unwind' as the steering wheel (to which the moving part is attached) is turned, maintaining electrical contact at all times between the electronic control module and the air bag module. The clockspring is used in order to achieve the high degree of circuit integrity required by such a critical safety system as the Supplementary Restraint System (SRS).

The driver and passenger air bag modules consist of the following components which cannot be disassembled.

- Inflator
- Air bag
- Container
- Cover

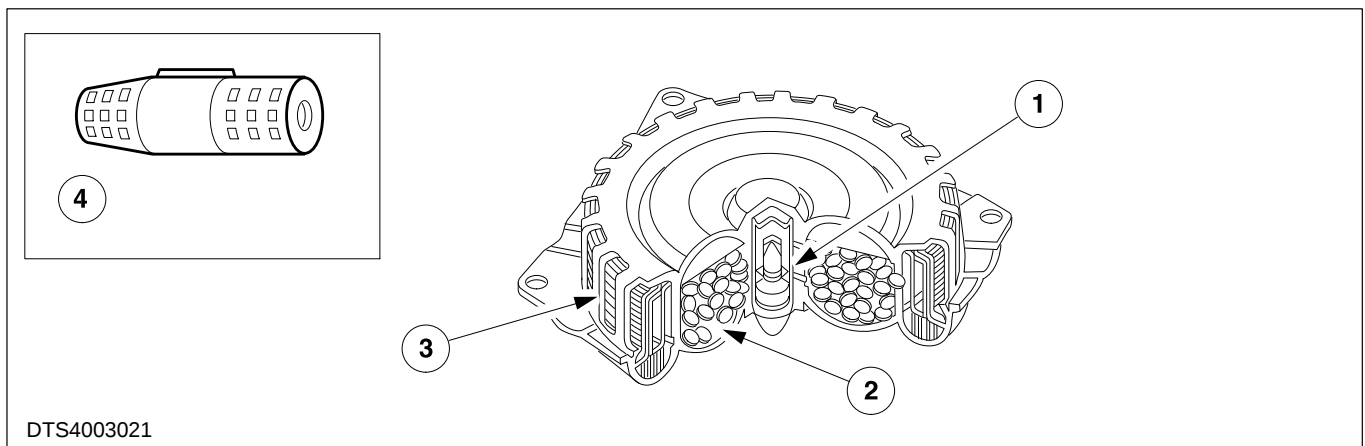
The inflator is screwed into a metal cup-shaped container. The air bag is then folded on top of the inflator and the whole subassembly is closed by the cover.

The driver air bag module is fitted to the steering wheel, the cover forming the outer surface of the steering wheel boss. The cover has invisible 'split lines' moulded in its surfaces allowing the air bag to easily exit through the cover when the system deploys.

The passenger air module is located above the glove compartment and is integrated into the fascia crash pad top to provide an unobtrusive appearance. The cover is a one piece moulding held by five clips and a short retaining strap. As the air bag deploys, the cover is forced free of the clips, but remains attached to the fascia crash pad by the short retaining strap.

The purpose of the inflator is to generate the gas needed to fill the air bag. It consists of a high strength steel casing filled with a solid propellant charge and an electrically activated igniter. The igniter is activated by a signal from the electronic control module which in turn ignites the propellant charge. The very rapid burning of the propellant produces sufficient gas to fill the air bag(s). As the gases expand they cool, preventing heat damage to the air bag. The driver's air bag module has one inflator and air bag, with a filled volume of 30 litres. The passenger air bag module has two inflators and bag having a filled volume of 60 litres.

The air bag(s) are a one-piece woven item with a silicon coating to provide flame and heat protection in the vicinity of the inflator. The shape of the passenger air bag is tailored to the vehicle proportions.



Item	Description
1	Igniter
2	Propellant charge
3	Catalyst
4	Passenger inflator unit