PRINCIPLE OF OPERATION

In the event of a collision, the airbag control unit monitors the rate of deceleration induced by the collision, to determine whether the airbags should be deployed.

Operation of the airbag SRS is dependent on the rate at which the vehicle's passenger compartment changes speed as a result of a collision. The circumstances affecting different collisions (vehicle speed, angle of impact, type and size of object hit, for example), vary considerably and will affect the rate of deceleration accordingly.

When deployed, inflation of the airbag is virtually instantaneous and occurs with considerable force, accompanied by a loud noise. The inflated bag, together with the seat belt restraint system, limit the movement of an occupant, thereby reducing the risk of injury to the head and upper torso.

Provided the occupants are correctly seated, with the seat belts properly worn; in the event of a severe frontal impact, the airbags will provide additional protection to the chest and face of the front seat occupants.

In the event of a severe side collision, airbags provide additional protection to the side of the head and body facing the impact for front seat occupants and to the side of the head facing the impact for outer rear seat occupants.

Note: *Inflation and deflation of the front and seat mounted side airbags takes place very quickly and will not protect against the effects of secondary impacts that may occur. Head airbags deflate at a slower rate and therefore do offer some additional protection in the event of a secondary impact.*

The Supplementary Restraint System (SRS) components include:

- SRS warning indicator.
- Rotary coupler.
- Airbag modules.
- Airbag diagnostic control unit.
- Crash sensors.
- Airbag wiring harness.
- Seat occupancy sensor.

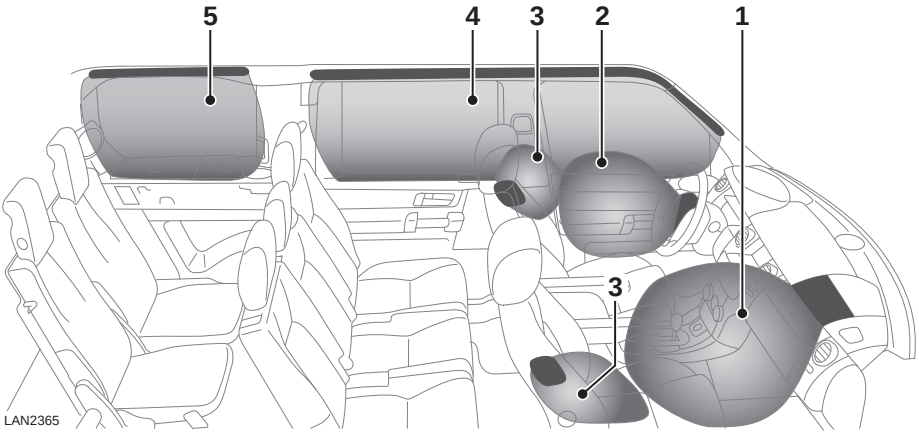
The airbag SRS is not designed to operate as a result of:

- Rear collisions.
- Minor front impacts.
- Minor side impacts.
- Heavy braking.
- Driving over bumps or potholes.

It follows, therefore, that significant superficial damage can occur without the airbags deploying or, conversely, that a relatively small amount of structural damage may cause the airbags to be deployed.

Supplementary restraints system

Airbags



1. Front passenger's airbag.
2. Driver's airbag.
3. Side airbags.
4. Front curtain airbags.
5. Rear curtain airbags.

WARNINGS

High speed impacts may cause serious injury or death irrespective of safety features fitted to a vehicle. Always drive with caution and consideration for the vehicle's characteristics, road and weather conditions, and do not exceed any speed limits in force.

Seat belts should be worn at all times, by the driver and passengers in all seating positions. The airbag supplementary restraint system (SRS) cannot provide protection in some types of impact. Under these circumstances the only protection will be provided by a correctly worn seat belt.

WARNINGS

Airbags inflate at high speeds, and can cause injuries. To minimise the risk of injury, ensure that all vehicle occupants wear correctly positioned seat belts, sit correctly in the seats, and position the seats as far back as practical.

Ensure that a gap is maintained between the side of the vehicle and the head and torso. This will enable unobstructed inflation of the curtain, and seat mounted side airbags.

Airbag inflation takes place instantaneously and cannot protect against the effects of secondary impacts. Under these circumstances the only protection will be provided by a correctly worn seat belt.

Phone systems should only be installed by qualified persons familiar with the operation of, and requirements for, vehicles fitted with SRS. If you are in any doubt, seek advice from your Dealer/Authorised Repairer.

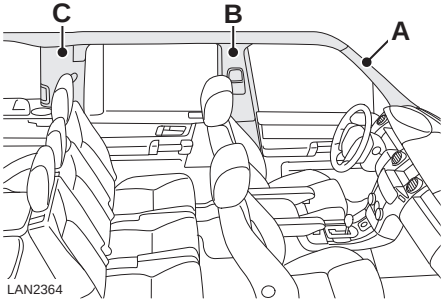
Obstruction of airbags

WARNINGS

For the airbags to operate correctly the roof lining and door posts must be in good condition, correctly fitted, and free from obstruction. Any damage, wear or incorrect fitment should be referred to your Dealer/Authorised Repairer as soon as possible for examination and repair.

Do not allow passengers to obstruct the operation of the airbags by placing any part of their person, or any objects in contact with, or close to, an airbag module.

Do not attach or position items on, or close to the roof lining, **A**, **B** and **C** post finishers, front seat backrests or to an airbag cover, which could interfere with the inflation of the airbag or be propelled inside the vehicle causing injury to the occupants.



Do not use non-approved seat covers/accessory seat covers over a front seat; in particular, seat covers that have not been designed for use with side airbags. If in doubt, consult your Land Rover Dealer/Authorised Repairer.

Note: *Unauthorised modification of the vehicle or parts may invalidate the vehicle's warranty.*

Deployment effects

WARNINGS

After inflation some airbag SRS components are hot. To prevent injury, do not touch the components until they have cooled.

In order to react with sufficient speed, airbags are deployed by an explosive charge. Consequently airbag deployment is accompanied by a very loud noise which may cause discomfort and temporary loss of hearing.

An airbag will only provide additional protection in certain types of frontal collisions. No protection is afforded against the effects of rear impacts, or minor frontal impacts.

Inflation and deflation take place instantaneously and will not provide protection against the effects of secondary impacts that can occur during multiple vehicle collisions.

When an airbag inflates a fine powder is released. This is normal and not an indication of a malfunction. However, the powder may cause irritation to the skin and should be thoroughly flushed from eyes and any cuts or abrasions.

Activation of an airbag creates dust, causing possible breathing difficulties for asthma sufferers or other people with respiratory problems. If an airbag is activated, any occupant who suffers from breathing difficulties should either leave the vehicle as quickly as possible, or obtain fresh air by fully opening the windows and doors.