Vehicle Types and Components - Visual Glossary of Terms

A guide to specific names and terms used in the construction of motor vehicles and components, suitable for fire/rescue interpretation for extrication training.

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>Description</th>
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<tbody>
<tr>
<td>2 door car/Hatchback</td>
<td>This description covers all manufacturers' cars of this type.</td>
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<tr>
<td>2 door coupe</td>
<td>This description covers all manufacturers' cars of this type. Be aware that some coupes are equipped with a hatchback.</td>
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<tr>
<td>2 door convertible</td>
<td>This description covers all manufacturers' cars of this type. Convertibles will have at least 4 seats (2 + 2)</td>
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<tr>
<td>Sports car/Roadster</td>
<td>This description covers all manufacturers' cars of this type. Sports cars can also be equipped with a hard top.</td>
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<tr>
<td>4 door Hatchback</td>
<td>This description covers all manufacturers' cars of this type.</td>
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<tr>
<td>4 door car</td>
<td>This description covers all manufacturers' cars of this type.</td>
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<tr>
<td>4 door estate car</td>
<td>This description covers all manufacturers' cars of this type. Also known as a ‘station wagon’ or an ‘country man’</td>
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<tr>
<td>SUV – Suburban Utility Vehicle:</td>
<td>This description covers all manufacturers' cars of this type. This type is also known as APV – ‘all purpose vehicle’ or a ‘people carrier’</td>
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<tr>
<td>MPV – Multi purpose vehicle</td>
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</table>
SUV – Suburban Utility Vehicle:

4x4 Jeep – All terrain vehicle

This description covers all manufacturers’ cars of this type. They can also be called ATV – ‘all terrain vehicles’.

SUV – Suburban Utility Vehicle:

4x4 Truck – All terrain vehicle

This description covers all manufacturers’ cars of this type. They are also known as a ‘pick-up’ or ‘combi’.

Front header channel

Roof’s side channel

Windscreen pillar

Front doorpost

Sill

The windscreen pillar and front door post often referred to as the ‘A’ post, can be most misleading where they are in fact separate components.

The sill is also referred to as the ‘rocker panel’

Rear Header channel

Rear roof post

Rear door post

Centre post

Sliding side door

The centre post is commonly referred to as the ‘B’ post which leads to confusion when discussing MPV’s and pillarless vehicles that have a centre post built into both front and rear passenger doors.

Dash cross-member

Side-on engine (Transverse)

Front chassis member (Longitudinal)
Door Airbag – Thoracic and head (Window deploying)
Electronic pretensioner
Electronic sensors (SIPS)
Steering wheel airbag
Front passenger airbag

DSU – diagnostic sensing unit
CU – control unit
Sensor (SRS)
Sensor (SIPS)
Sensor (ROPS)
Weight classification system - WCS
Position orientation detection - POD

Sensor built into the fabric of the drivers seat which determines how many gas generators fire in relation to the weight of the seat occupant

Registers the incorrect placement of the child seat and switches off the front passenger airbag.

Multi generator airbag (Dual Stage)
Electronic seatbelt pretensioner
Inflation curtain

Seat mounted airbag

Inflation Curtain (IC)

Inflation cylinder

Duel inflation curtains: Two individual inflation curtains; one for the front and the other for the rear, each inflated by separate cylinders

Deployed inflation curtain

Head Protection System:
- Bolster
- Inflation cylinder

Head Protection System: HPS
- Bolster
Seatbelt retractor – inertia reel (Grabber)

Mechanical buckle pretensioner – compression spring with weight sensor

They are also known as an 'inertia reel' or a 'grabber'.

There are several different designs for mechanical buckle pretensioners but all are known by the same name.

Seat ramp

Mechanical seatbelt Pretensioner with remote actuator

The seat ramp can be vacuumed formed out of rigid plastic or made of pressed steel.

Electronic seatbelt pretensioner

Discharge tube

Connector plug

Electronic buckle pretensioner

Discharge tube

Connector plug
HSS – High strength steel seatback
Boron steel seat bracket
Seat ramp
Seat cross-member
Mechanical seat mounted airbag – Thoracic
Pyrotechnic lines
Percussion cap sensor
Electronic seat mounted airbag – Thoracic
SIP wiring
Electronic sensor
Mechanical seatbelt buckle pretensioner with remote actuator
Electronic buckle pretensioner
Control unit
SIPS sensor – *Side impact sensor*

**ROPS**
Roll over protection system
ROPS sensor

*4 door car pillar-less*

Also known as a ‘roll over bar’ even though the roll over bar is a fixed item and has no need of a deployment system.

This description covers all manufacturers’ cars and 4 x 4;s of this type.

This design type will have in-built strengthening to the roof’s side channel and sill. In effect a centre post is built into both the front and rear doors.

**4 door pillarless:**

Front doorpost
Centre posts – *built into the doors’ structure*
Rear door post

The centre post is commonly referred to as the ‘B’ post which leads to confusion when discussing pillarless vehicles that have a centre post built into both front and rear passenger doors.

Boron steel gussets and strengtheners
HSS – High strength steel
Hydro-formed side structure

One piece hydro-formed metal injection moulding
Door strengthening bars  
(HSS – high strength steel)  

Also known as door supports and side-bars.

Extrication evolution:  
Dash roll  

The original term ‘dash-roll’ has been changed by some whom mistakenly use the term ‘dash-push’.

Extrication evolution:  
Dash lift

Extrication evolution:  
Steering wheel relocation

Extrication evolution:  
Coupe (2 door):  
Extrication evolution:  
Roof removal

The extrication evolution ‘roof removal’ is a valid term for all vehicles that have a roof structure which is cut away in the process of extrication.

Extrication evolution:  
4 door hatchback:  
Extrication evolution:  
Roof removal

Extrication evolution:  
4 door estate car:  
Extrication evolution:  
Roof Removal
Rear quarter panel
(Rear ¼ panel)

2 door car:
Extrication evolution:
Cutting away the rear ¼ panel
(Third door evolution)

4 door car/hatchback/estate car:
Extrication evolution:
Side removal – complete with rear door

2 door car/hatchback -
Extrication evolution:
Inverted side removal
Cutting away the rear ¼ panel

4 door car:
Extrication evolution:
Inverted side removal – Removal of the centre post complete with rear door

2 door car/hatchback:
Extrication evolution:
The Clam – Strategic cutting and ramming

Also known as a ‘third door evolution’ or ‘side-removal’, this evolution was first detailed as ‘rear ¼ panel removal’ in ‘RTA persons trapped’ in 1990.

The ‘Clam’ must never be mistaken for the ‘Oyster’ evolution, as the techniques are very different. The ‘Oyster’ removes all structural support and as a worst-case scenario can see the structure collapse whereas, the ‘Clam’ leaves one side of the vehicle intact; in effect completely removing any risk of collapse.
4 door car/hatchback:

Extrication evolution:
The Clam – Strategic cutting and ramming

Hybrid vehicle:

‘Ready go’ –
*Where the petrol engine has stopped, where the ‘Ready Go’ indicator is lit, the car can be driven away under electric power.*

FCV – Fuel cell vehicle

‘Keyless Go’ -
Transponder

IGCT Relay –
_Integrated Gate Commutated Thyristor_

NiMH Battery pack

HV – High voltage (144 – 1000V)

Power cable

DC - Direct current