

Vehicle Types and Components - Visual Glossary of Terms

Other 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.

2 door car/Hatchback



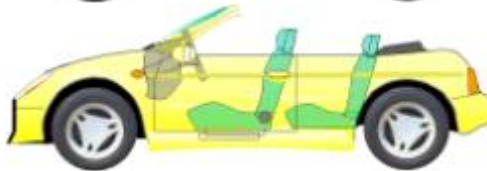
This description covers all manufacturers' cars of this type.

2 door coupe



This description covers all manufacturers' cars of this type. Be aware that some coupes' are equipped with a hatchback.

2 door convertible



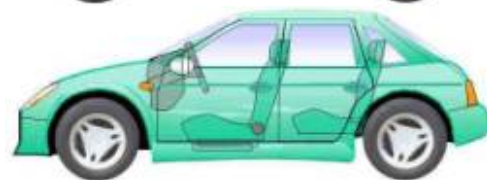
This description covers all manufacturers' cars of this type. Convertibles will have at least 4 seats (2 + 2)

Sports car/Roadster



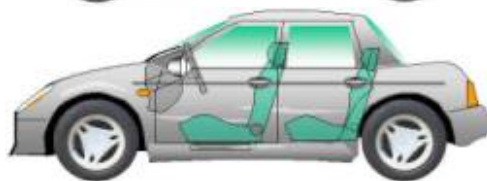
This description covers all manufacturers' cars of this type. Sports cars' can also be equipped with a hard top.

4 door Hatchback



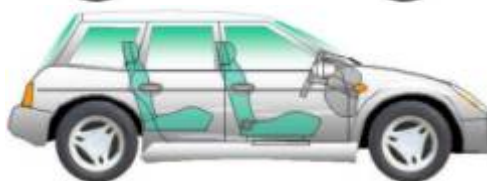
This description covers all manufacturers' cars of this type.

4 door car



This description covers all manufacturers' cars of this type.

4 door estate car



This description covers all manufacturers' cars of this type. Also known as a 'station wagon' or an 'country man'

SUV – Suburban Utility Vehicle:

MPV – Multi purpose vehicle



This description covers all manufacturers' cars of this type. This type is also known as APV – 'all purpose vehicle' or a 'people carrier'

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'.

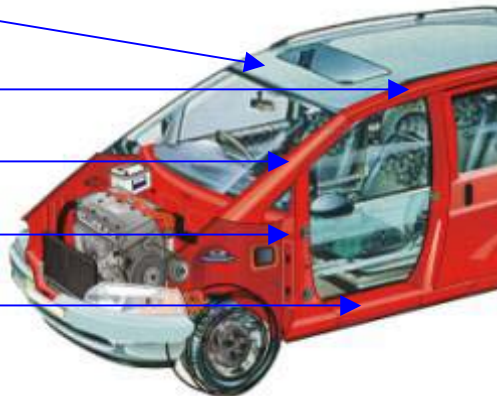
Front header channel

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'

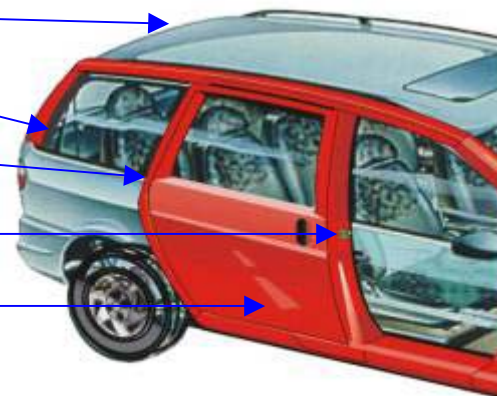
Rear Header channel

Rear roof post

Rear door post

Centre post

Sliding side door

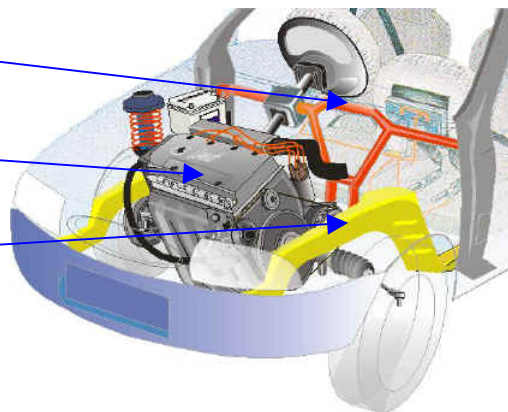


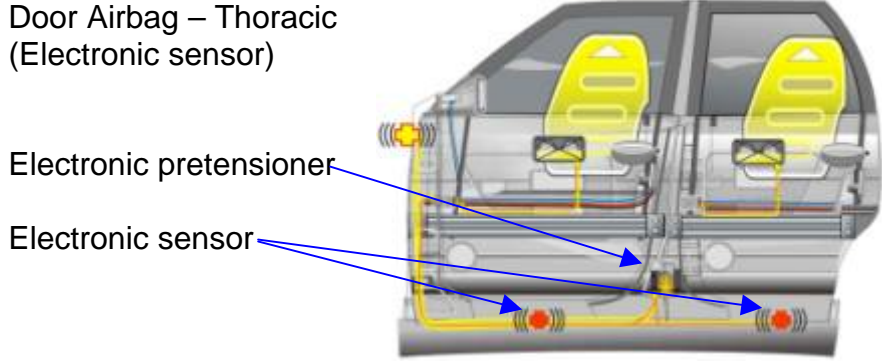
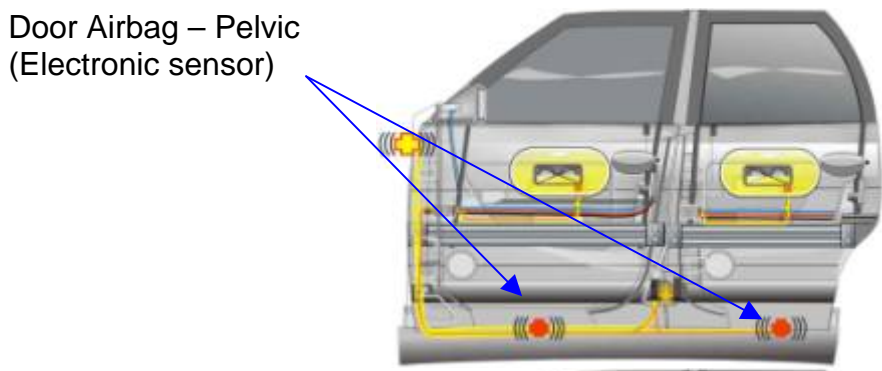
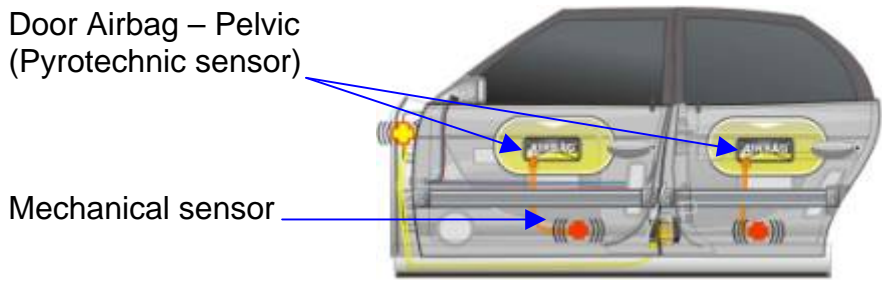
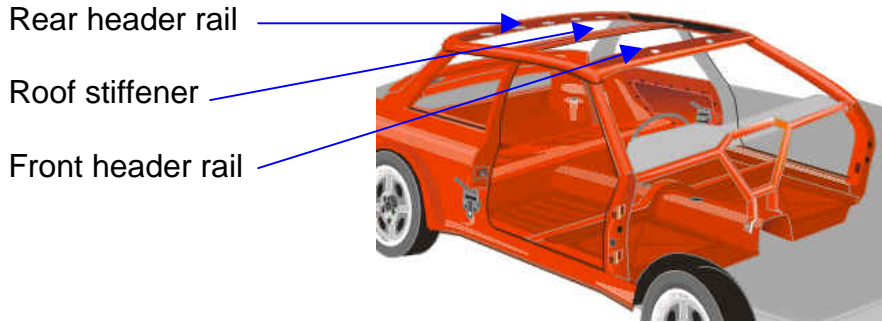
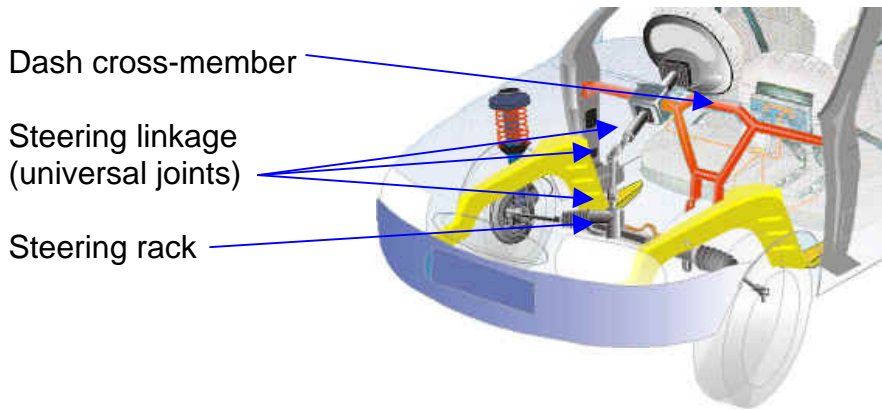
The centre post is commonly referred to as the 'B' post which leads to confusion when discussing MPV's and pillarless vehicles that have a centre post built into both front and rear passenger doors.

Dash cross-member

Side-on engine (Transverse)

Front chassis member (Longitudinal)

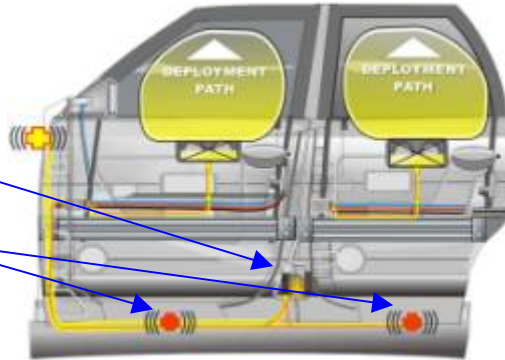




Door Airbag – Thoracic and head (Window deploying)

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

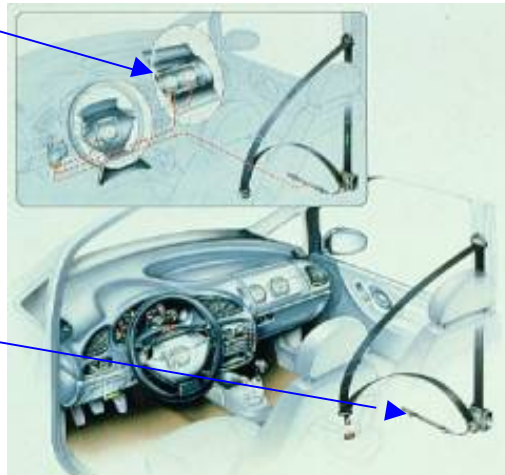
Position orientation detection - POD

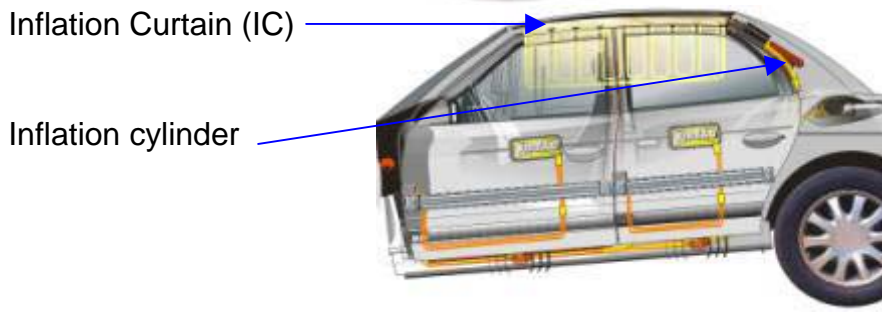
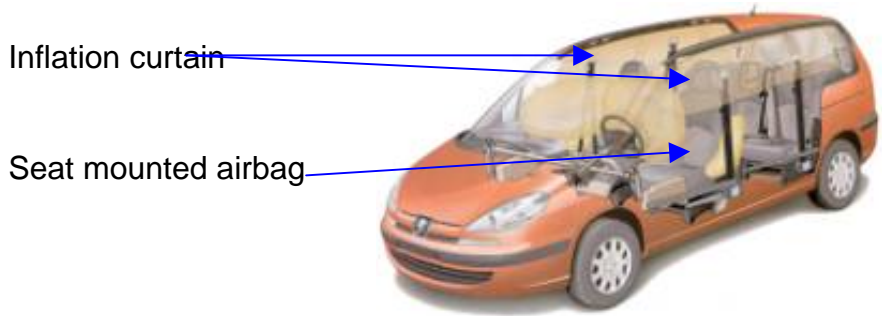
Sensor built into the fabric of the drivers seat which determines how many gas generators fire in relation to the weight of the seat occupant

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

Multi generator airbag (Dual Stage)

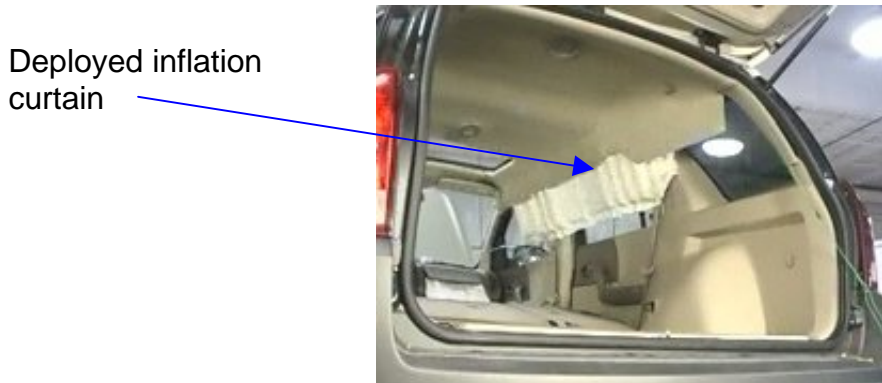
Electronic seatbelt pretensioner





Dual inflation curtains

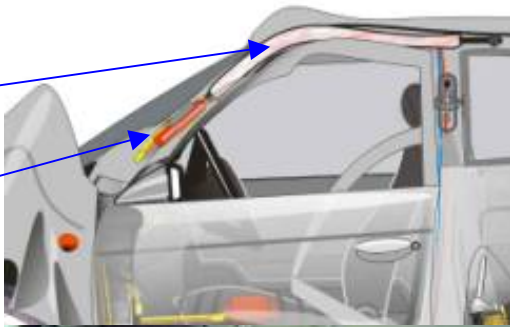
Two individual inflation curtains; one for the front and the other for the rear, each inflated by separate cylinders



Head Protection System:

Bolster

Inflation cylinder



Head Protection System: - HPS

Bolster



Seatbelt retractor – inertia reel (Grabber)



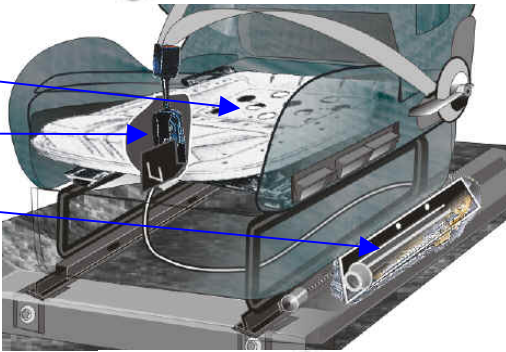
They are also known as an 'inertia reel' or a 'grabber'

Mechanical buckle pretensioner – compression spring with weight sensor



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 vacuum formed out of rigid plastic or made of pressed steel.

Electronic seatbelt pretensioner

Discharge tube

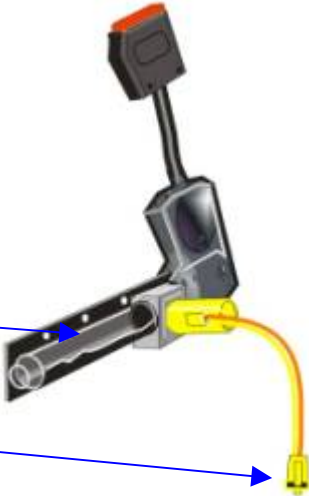
Connector plug



Electronic buckle pretensioner

Discharge tube

Connector plug



HSS – High strength steel seatback

Boron steel seat bracket

Seat ramp

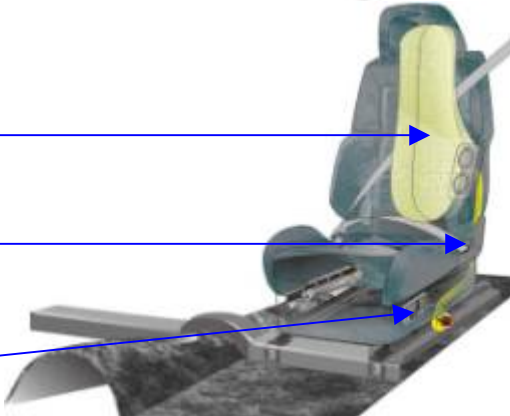
Seat cross-member



Mechanical seat mounted airbag – Thoracic

Pyrotechnic lines

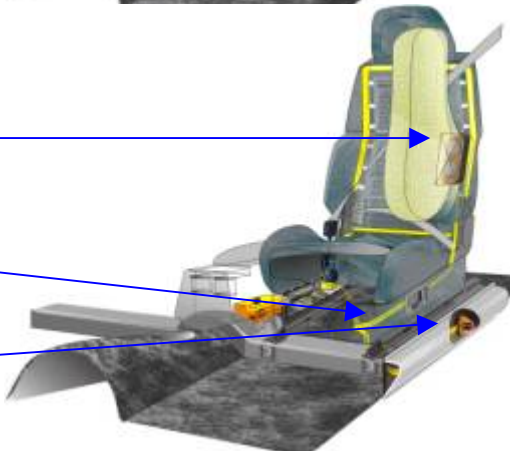
Percussion cap sensor



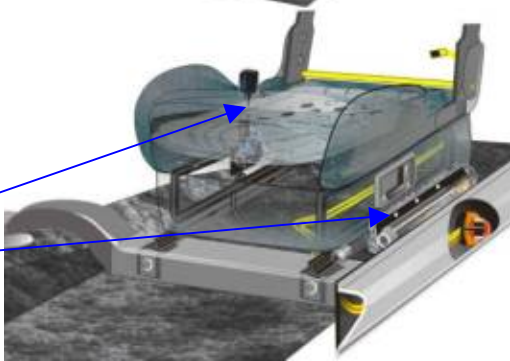
Electronic seat mounted airbag – Thoracic

SIP wiring

Electronic sensor



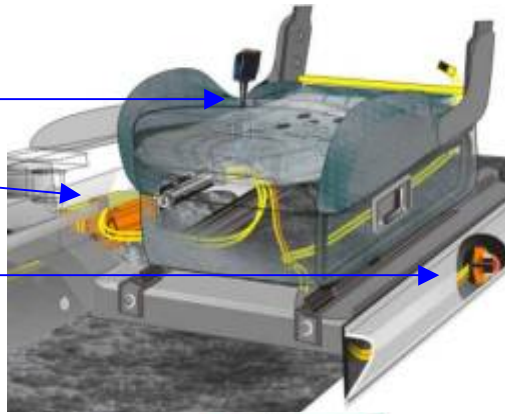
Mechanical seatbelt buckle pretensioner with remote actuator



Electronic buckle pretensioner

Control unit

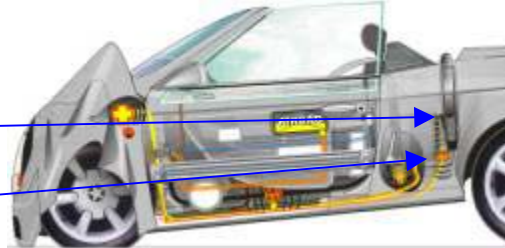
SIPS sensor – *Side impact sensor*



ROPS

Roll over protection system

ROPS sensor



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..

4 door car pillar-less



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

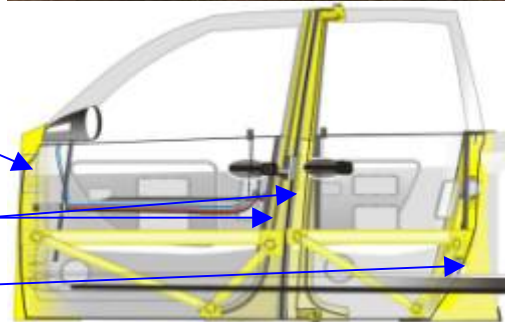
This design type will have in-built strengthening to the roof's side channel and sill. In effect a centre post is built into both the front and rear doors.

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



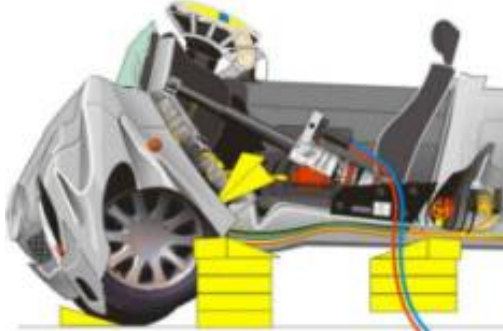
One piece hydro-formed metal injection moulding

Door strengthening bars
(HSS – high strength steel)



Also known as door supports and side-bars.

Extrication evolution:
Dash roll

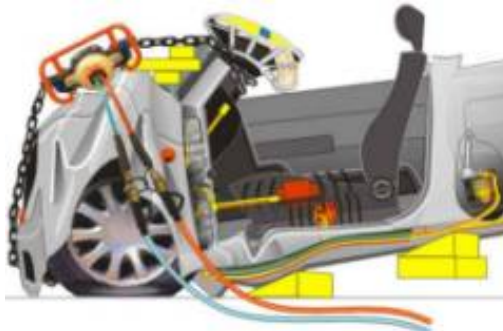


The original term 'dash-roll' has been changed by some whom mistakenly use the term 'dash-push'.

Extrication evolution:
Dash lift



Extrication evolution:
Steering wheel relocation



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.

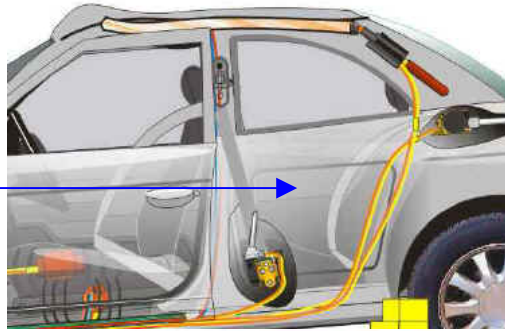
4 door hatchback:
Extrication evolution:
Roof removal



4 door estate car:
Extrication evolution:
Roof Removal

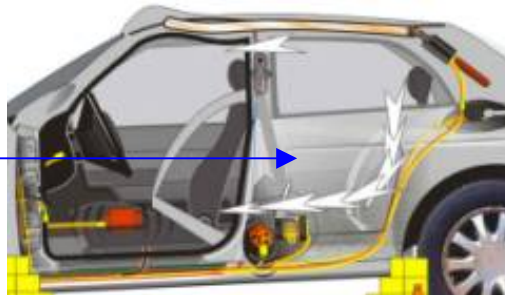


Rear quarter panel
(Rear ¼ panel)



2 door car:

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



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.

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



2door 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:

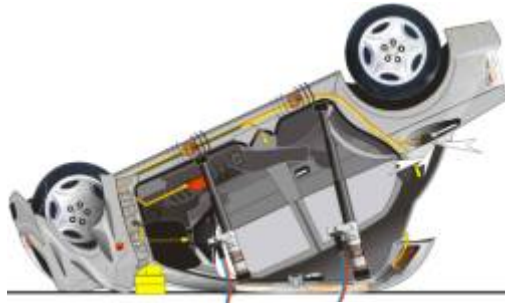
Extrication evolution:
The Clam – Strategic
cutting and ramming



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

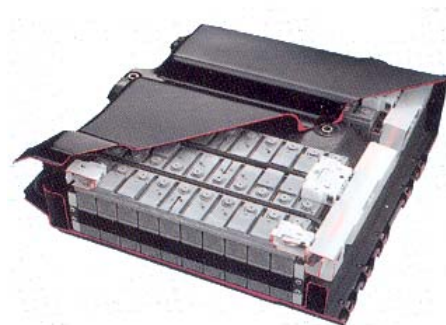


Enter and drive authorisation system – (Close proximity unlock and ignition activation)

IGCT Relay –
Integrated Gate Commutated Thyristor

Automatic shut-off relay for the hybrid HV power cable in the event of an impact

NiMH Battery pack



HV – High voltage (144 – 1000V)

Power cable

Hybrid and fuel cell vehicles generate anywhere between 144 – 1000 volts of direct current which is converted to AC in a converter to power the electric motor.

DC - Direct current



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