Heavy Goods Vehicle Terminology

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This guide is designed to help those who are unfamiliar with the differing vehicle types and configurations of trucks that make up the heavy commercial sector. It will also attempt to explain some of the unique terminology used in the HGV industry, and where possible illustrate with images.

There is a huge amount of legislation that applies to the transport industry, relating to vehicle dimensions and weights, emissions, safety, standards of construction etc as well as that relating to the actual daily operation of goods vehicles. This guide will not specifically cover legislation since this is another complex subject.

Heavy goods vehicles (trucks) consist of two types – rigids and tractor units. The former are complete vehicles fitted with additional bodywork designed for carrying the load, whereas the latter are coupled to semi-trailers, and are commonly known as articulated combinations (artics for short) because they articulate, ie bend, in the middle.

In the case of rigids, truck manufacturers assemble the chassis-cab (literally a chassis with a driver’s cab fitted at the front), and a third party constructs the load-bearing bodywork that is fitted to the rear of the cab. Tractor units are generally completely assembled by the truck manufacturer.
Chassis lay-outs

Chassis lay-outs are described according to how many “wheels” are driven by the engine, and how many are not. Twin wheels/tyres are treated as a single “wheel” for the purposes of chassis layout.

For example a 4x2 layout (4x2 is pronounced 4 by 2, and is not to be confused with a piece of wood!) means 4 “wheels”, 2 of which are driven (rear wheel drive in the case of a truck). There can be as many as 8 “wheels” on a conventional truck, with the combination of driven/non-driven depending upon the work that a truck is required to carry out.

The standard layouts are as follows:

4x2
Axle 1=steer, axle 2=drive

6x2 Mid-lift
Axle 1=steer, axle 2=lift (non-steer), axle 3=drive

6x2 Twin-steer
Axle 1=steer, axle 2=steer, axle 3=drive
(second steer axle sometimes lifts as well – known as Mid-lift Twin-steer)

6x2 Rear-lift
Axle 1=steer, axle 2=drive, axle 3=lift (single or twin wheels) Also known as a Tag Axle
Chassis lay-outs continued

**6x2 Rear-steer**
Axle 1=steer, axle 2=drive, axle 3=steer
(sometimes lifts as well)

**6x4**
Axle 1=steer, axles 2 & 3=drive

**8x2 Rear-lift**
Axles 1 & 2=steer, axle 3=drive, axle 4=lift
(single or twin wheels)

**8x2 Rear-steer**
Axles 1 & 2=steer, axle 3=drive, axle 4=steer
(sometimes lifts as well)

**8x4**
Axles 1 & 2=steer, axles 3 & 4=drive

There are some other more complex layouts that are used in highly specialised operations, but these are extremely rare.
**Manufacturer “speak”**

Truck manufacturers have different “names” for the layouts described above. If you need to know what any of the odd letters and numbers mean in a model description, please ask one of the HGV Editorial team.

**This section covers the two main vehicle types in detail.**

**Rigid vehicles**

As previously mentioned, truck manufacturers assemble a chassis-cab, and a third party known as a bodybuilder constructs the bodywork that will contain the load. The type, size and layout of a rigid vehicle depends upon the work required.

**A typical chassis-cab**

Generally speaking rigid trucks start at 7.5 tonnes gross weight (including payload etc) and go up to 18 tonnes on two axles, 26 tonnes on 3 axles, and 32 tonnes on four axles. The maximum legal length for a rigid vehicle is 12 metres.

Engine power outputs range from around 160bhp to about 400bhp, depending upon model and application.

Transmissions tend to be manual at lower outputs, and automatic at higher levels, although some manufacturers provide automated gearboxes as standard throughout their model ranges.

Rigid vehicles can also pull a trailer, the maximum weight of which is determined by a combination of the truck’s maximum design weight and the legal maximum permitted in the EU. Broadly speaking if the design weight permits it, rigid and trailer combinations (called drawbars) can operate up to 40 tonnes all-up weight on a total of 5 axles (inc trailer), and up to 44 tonnes on 6 axles.

**A typical 44 tonne drawbar combination**

Rigid trucks can be fitted with a variety of cabs, again depending upon the operation required. Lighter models tend to have day cabs, whereas some of the heavier versions are fitted with sleeper cabs with either one or two bunks. These cabs enable drivers to sleep overnight when they are away from their operating base, and when they have driven for the maximum legal time.

**Cab availability**

Manufacturers have different names for the various types of cabs they offer, depending upon model, cab width and height.

**Examples are as follows:**
Cab availability continued

- DAF LF & CF day cab
- DAF LF & CF sleeper cab
- DAF CF Space cab sleeper
- DAF XF Space-cab high-roof sleeper
- DAF XF Superspace cab extra high-roof sleeper
- Iveco Eurocargo day cab
Cab availability continued

- Iveco Eurocargo sleeper cab
- Iveco Stralis Hi-Street day-cab
- Iveco Stralis Hi-Road high-roof sleeper
- Iveco Stralis Hi-Way extra high-roof sleeper
- MAN TGL & TGM day cab
- MAN TGL & TGM sleeper cab
MAN TGS L sleeper cab

MAN TGS LX high-roof sleeper

MAN XLX high-roof sleeper

MAN TGS L sleeper cab

MAN TGX XL sleeper cab

MAN TGX XXL extra high-roof sleeper
Mercedes Atego day cab

Mercedes Atego sleeper cab (old model)

Mercedes Antos day cab

Mercedes Actros ClassicSpace sleeper cab

Mercedes Actros Streamspace/BigSpace high-roof sleeper

Mercedes Actros GigaSpace extra high-roof sleeper

Cab availability continued
Cab availability continued

- Renault D-Range day cab
- Renault T-Range sleeper cab
- Scania P-Range day-cab
- Scania G & R Range day cab
- Scania G & R Range sleeper cab
- Scania R Range Highline high-roof sleeper cab
Renault D-Range day cab
Renault T-Range sleeper cab
Scania P-Range day-cab
Scania G & R Range day cab
Scania G & R Range sleeper cab
Scania R Range Highline high-roof sleeper
Scania R Range Topline extra high-roof sleeper
Volvo FL & FE day cab
Volvo FL & FE sleeper cab
Volvo FM day cab
Volvo FM sleeper cab
Volvo FM Globetrotter high-roof sleeper
There are other variants available on construction models, and not all cabs are available on all models, but this is a broad description of availability by model range.

**Additional bodywork**

The UK transport industry uses several types of additional bodywork to carry goods. Although different operators will have their own individual specifications, the body types can be categorised into several “standard” definitions.

**These are:**

**Platform**

**Dropside**
Additional bodywork continued

Boxvan

Curtainside

Refrigerated Box

Tipper

Skiploader

Hookloader
There is also a huge variety of additional equipment that can be fitted to trucks, such as hydraulic cranes, tail-lifts, pumping systems, winches etc that are specific to each transport sector and operation.

In addition to these standard bodywork types there are many other “industry-specific” versions such as car transporters, tankers, fire appliances, recovery vehicles, road sweepers, refuse vehicles, removal vans, concrete mixers and pumps to name but a few. Again, the operator determines the optimal specification to fulfil the needs of the work required.

**Articulated combinations**

Tractor unit/trailer combinations make up the majority of vehicles in the UK transport industry. They are called “articulated” because they “bend” in the middle. Tractor units are also commonly known as “artics” or “tractors” – not to be confused with the agricultural versions.

The maximum weight at which a combination can operate is governed by legislation which is designed to improve safety and reduce road damage. A five-axle combination can weigh a maximum of 40 tonnes including payload etc, and a six-axle combination has a 44 tonne limit. Drivers and operators can be severely fined if these weights are exceeded. There are also limits on how much weight can be imposed on each axle.

Cab availability generally matches that of higher-powered rigid vehicles.

Power outputs for tractor units range from around 400bhp, and rise to about 750bhp for specialist heavy haulage operations that can work at gross combination weights up to 200 tonnes. These vehicles are subject to legislation that differs from conventional 44 tonne units. The majority of tractor units are supplied with automated transmissions.

As with rigid vehicles, each operator will tailor chassis layout, cab type and engine power to suit their exact requirements.

Semi-trailers (commonly abbreviated to “trailers”) are coupled to tractor units by using something called a “fifth wheel” mounted to the tractor unit chassis – so-called because of its slight (very!) resemblance to a road wheel.

Under the front of a trailer is a “king pin” that locks into the jaws of the fifth wheel. In order for the trailer brakes and lights to operate the driver also connects compressed air and electrical feeds from the tractor units to the front of the trailer using coiled pipes called “susies”

Trailers themselves broadly match the bodywork types fitted to rigid vehicles. However, much like the rigid sector there are is a huge variety of trailer bodywork available, again depending upon the type of goods being carried, and there is a myriad of industry specific names for specific items of equipment.
The weird and wonderful

The truck world is full of strange specialist models and equipment, often carrying unusual names or nicknames.

Here are a few examples:

**Beaver tail**
So-called because the rear section of the body slopes down – similar to the tail of a beaver – yes really!

**Gulley sucker**

**Front-end loader**
Nothing to do with ladys’ underwear!

**Rear-end loader**
No comment required!

**Dual sweep truck**
Nothing to do with chimneys!
Walking floor
Moving planks literally “walk” the payload out

Cheese-wedge
Used to describe ramps fitted to a beaver-tail body to create a flat surface to rear section

Wet kit
Nothing to do with swimming costumes
A hydraulic system fitted to tractor units to operate tipping rams on trailers

Susies
No idea where this name came from!
The air & electric feed pipes from tractor unit to trailer

In conclusion, the HGV market is extremely complex and uses unique terminology which can be confusing for those outside the industry. Modern trucks are extremely complicated machines fitted with cutting-edge technology, and there are many aspects that are not covered in this guide. Hopefully this document provides a degree of insight, and with the help of the images will aid easier identification of models.

If there are any questions arising from this guide, please contact a member of the HGV editorial team, and we will be pleased to help.

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