



Aftermarket Towbars: All You Need to Know.

This document explores aftermarket tow bars and tow bar installation. It discusses the different types of tow bars, the towing electrics, and other information that you need to know when buying a tow bar for your vehicle.

- **What type of tow bar do I need?**
- **Tow balls, the right ball for the job.**
- **Type Approval Legislation.**
- **Towbar weight Limits.**
- **Which type of electrics do you need?**
- **What is vehicle coding and do I need it?**
- **Bumper Cuts.**
- **Should I inform my insurance company that a tow bar has been fitted?**
- **Lease and Finance-owned vehicles.**
- **Tow bar guarantees.**

Nothing is ever simple and getting an aftermarket tow bar fitted certainly isn't as simple as it should be.

You could get your local car repair centre to fit your tow bar, try fitting it yourself, or get a mate to help out, but unless they are trained, experienced and specialise in tow bar installation then it may not be the best idea.

The thing with tow bars is, that they are a safety critical part of a vehicle and as such need to be installed exactly to the

manufacturer's instruction to comply with type-approval legislation. . On modern vehicles, if the tow bar is not fitted to the manufacturer's instruction, then the tow bar is illegal and using it can get you points on your licence and a fine.

It's really not worth the risk. Get a professional company to install the tow bar and be safe in the knowledge that it is safe and legal.

So, having said that, here's everything you need to know about getting a tow bar fitted.

What type of tow bar do you need?

There are basically three types of tow bar. The fixed flange, fixed swan neck and the detachable.

Fixed flange tow bars are more for commercial or heavy use. The tow ball attaches with two or more, bolts to a flange on the tow bar.



Fixed Flange Towbar.

There are three types of tow ball that can be bolted to the flange, the standard tow ball, the ALKO-compatible tow ball, and the Ball and Pin.

The **standard tow ball** is a 50mm ball that can be used for trailers or cycle carriers, but should never be used to attach an ALKO-style hitch due to the neck of the tow ball not being long enough to accommodate the ALKO hitch.



The **ALKO-compatible** tow ball has a longer reach neck, which is required by an ALKO hitch. You can also use the ALKO ball for trailers and cycle carriers.



The **ball and pin style** neck is designed for commercial use and uses a standard 50mm ball (unsuitable for caravan towing due to not being compatible with ALKO style hitches.)



Fixed swan neck tow bars are sleeker than the flange tow bar and a popular choice for modern vehicles. The neck has a 50mm ALKO-compatible ball, making it compatible with all but commercial use.



Fixed Swan Towbar

The **detachable swan neck towbar** is similar to the fixed swan type. The difference is that the neck part of the tow bar can be detached when not in use, in most cases, you can't tell the vehicle has a tow bar when the neck is removed.



Detachable Tow Bar

The type of tow bar you require will depend on your intended use, personal preference, budget, and compatibility.

If your vehicle has a rear central fog light in the rear bumper, you will have no option but to have a detachable tow bar fitted, as obstructing the fog light is classed as a motoring offence. Other reasons for the detachable tow bar being the only option are, that the number plate is in the lower part of the bumper, and a tow bar would obscure the view. Also, if the vehicle has been fitted with aftermarket parking sensors, then a detachable may be the only option, this is often because the sensors are located in a different place from where they would if factory fitted.

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A fixed swan neck is less likely to interfere with parking sensors compared to a flange-style tow bar.

With some vehicles, there may be no option as to which tow bar type can be fitted. Many commercial vehicles can only have a fixed flange style tow bar due to that being the only style made for the vehicle.

As a rule, if you are regularly towing a heavy load, then a flange tow bar is most suitable. This is due to the tow ball being the part that will get worn and the part that is easily changeable.

For general towing, a swan neck tow bar is suitable and looks much neater than the flange tow bar for none commercial vehicles'.

If available a detachable swan neck is a good option for looks and the fact it can be removed when not in use.

Motorhome Towbar Fitting.

Due to modifications, the fitting of tow bars to motorhomes isn't always as straightforward as it may seem. If the vehicle has been extended, this is often completed using floor supports that are not strong enough to accommodate a tow bar. In this case, the vehicle will require the chassis to be extended. There may also be other modifications that would interfere with the installation of a tow bar, for this reason, it is always best to let the tow bar fitter see the vehicle before agreeing to fit the tow bar.

Type Approval Legislation.

Due to safety concerns, the government requires that all vehicles manufactured after August 1st 1998 require a type approved tow bar. A type-approved tow bar is manufactured to specific regulations and designed specifically for an intended make and model of vehicle.

Type approval on tow bars can be checked by looking at the type approval label attached to the tow bar. Unless the tow bar has a visible type approval label it is not legal to use.

Also, it should be noted that the installation of the tow bar must be completed exactly to the manufacturer's instructions.



Towbar weight limits.

The majority of type-approved tow bars will have a maximum tow weight that is the same or more than the vehicle they are fitted to. Always check the tow weight before agreeing to have the bar fitted. With the popularity of e-bikes, the maximum nose weight is important. The nose weight is the amount of vertical weight the tow bar can handle. Some manufacturers have higher nose weight specifications than others, so always check with the tow bar supply company that the nose weight is suitable for your proposed use.

Which type of electrics do I need?

You need the correct wiring for your vehicle, anything less is asking for trouble.

At Ultimate Towbars we do not recommend the fitting of universal or bypass wiring. This style of tow bar wiring was fine on older vehicles that did not have Controller Area Network (CanBus) electronics. Most vehicles made after 2015 have some form of CanBus and should never be fitted with the older style of tow bar wiring.

CAN bus is a message-based protocol that allows electronic devices in a vehicle to communicate with each other. Signals sent along the vehicle's wires are read by the devices and this allows for communications to be sent to and from the vehicle's devices. Safety features are controlled by the CanBus signals. To find out more about vehicle CanBus please see the following website

The CanBus-based tow bar wiring is, in most cases, not easy to install, but, once fitted, it is safer and more reliable than any other type of tow bar wiring.

Thirteen-pin socket or seven-pin socket?



The decision is mainly based on the type of plug you intend to connect to the vehicle. Older trailers and cycle carriers may have the old 7-pin connector, these are now replaced with 8 or 13-pin plugs.



The 7-pin socket allows signals to be sent to the trailer or bike carrier for basic lights to be displayed. There is no reverse light or any power signals on a 7-pin connection.

The newer, 13-pin connection provides for all light functions and can include power for electronic stability control (ESC) and for a 12-volt switched connection that serves a caravan fridge and auxiliary battery charge.

All new devices use the 13-pin plug, so it's advisable to have a 13-pin socket fitted to the tow vehicle.

What is vehicle coding, and do I need it?

Many vehicles have the ability to have their software updated to allow for the automatic activation of towing safety features when the tow bar electrics are connected. This can allow for features such as on-dash alerts, vehicle sway control, rear Parking sensor deactivation, changes to blind spot sensors, cruise control and several other changes dependent on the vehicle.

For the safety features to be active the vehicle needs to know that compatible tow bar wiring has been installed. To do this, the vehicle is coded by logging into its software and updating it.

Not all vehicles need their software updated, and in some cases, the software can't be updated due to being locked by the manufacturer during manufacturing.



How much time for installing a towbar?

The time it takes to install a tow bar and associated wiring depends on the vehicle and how many technicians are installing the system.

Generally, tow bars take between 2 and 4 hours to install; this includes the time for fitting the electrics and testing.

Should I inform my insurance company that a tow bar has been fitted?

Adding a tow bar is classed as modifying the vehicle, and in all cases, you should inform your insurance company. Failure to notify your insurance company could invalidate the insurance policy.

Having a tow bar fitted to a lease or Motability vehicle.

Prior to having a tow bar fitted to a lease or Motability vehicle, you should always get permission from the lease or finance company. This is especially essential if the company also supplies vehicle insurance. Not informing them could invalidate your insurance. It should also be noted that if you fit a tow bar without their consent



then when you return the vehicle, they may charge you for having the tow bar and electrics removed so the vehicle is back to factory specification.

The best practice is to contact the lease or Motability company to get their written consent for having a tow bar fitted.

They will require proof that the tow bar is fitted by a registered company and to type-approval standards.

Making sure you follow the requirements of the lease/finance company will save you from a hefty bill at the end of the lease contract.

Towbar Fitting Guarantees

There appear to be numerous guarantees advertised by tow bar fitting companies, these range from six months to the lifetime of the vehicle.

Several companies only offer customers guarantees from the tow bar or electrical wiring manufacturers, these will warranty the parts only and give no guarantee for the installation.

Reputable tow bar companies offer customer guarantees provided by themselves that cover the parts and the installation.

It is recommended that any guarantee is provided in a written or email format that provides the customer with a legally binding document.



Conclusion:

Installing a tow bar system to a vehicle is not a simple task and is certainly something that should not be attempted by an amateur mechanic. Unless the installer is trained and has experience, it's best to get a professional company to complete the job.

There are three different tow bar types, which one you need will depend on your vehicle and what you will use the tow bar for.

Vehicles manufactured after the 1st of August 1998 require a type-approved tow bar.

Modern vehicles have complex electronics that require vehicle-specific electrics that have been tested and approved for installation in the particular vehicle.

Many vehicles require their software updating after the tow bar electrics have been fitted

If you have a leased or Motability vehicle, it is best practice to contact them and get their permission to have a tow bar installed before getting one fitted.

Towbar installation takes between two and four hours, depending on the vehicle's make and model.

Guarantees need to be in either written or email format to be valid.



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Ultimate Towbars is a tow bar supply and fitting company based in Sheffield, South Yorkshire. They provide on-site tow bar fitting throughout a large area of the UK. For more information, please visit their website at www.ultimatetowbars.co.uk

Links:

<https://www.tow-trust.co.uk/>

<https://pctautomotive.com/>

<https://www.ultimatetowbars.co.uk/>

<https://www.ecs-electronicsuk.co.uk/>

<http://www.conwys.ch/>

<https://www.gov.uk/towing-with-car>

