

**TOWMASTER 2**  
by Roadmaster

**Towcar A-frames**  
**Vacuum Servo Assisted**  
**Electronic Braking**

LNB Towbars & Vehicle Extras Ltd.  
Telephone 0117 9694955

# TOWMASTER 2

by Roadmaster

Stronger  
Anti Binding  
Faster  
Easier

**Britain's quickest and easiest to use A-frame.**

*Our EZ Lock System is now even stronger and faster to attach.*



**Anti-Binding**  
NEW release levers, make it easy to release under pressure



**Stronger**  
NEW stronger, thicker construction



**NEW**  
Round stainless steel drawbars now stay retracted when folding away

**Security**  
Lockable coupling



**NEW Lynch Pin Design**  
Safe secure fittings



**Folds for EASY storage**  
Invisible when not towing.

**Powder Coat Finish**  
Baked on metal fleck for better protection

# TOWMASTER 2

by Roadmaster

Towmaster 2 retains all of the features and benefits of the previous model...

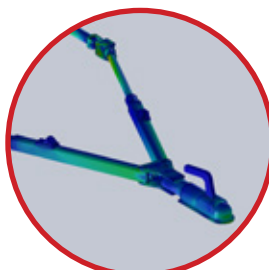
- Autolok Easy Hitch Auto Alignment System
- 1.2m long to avoid jackknifing
- FEA & Destruction Safety Tested
- Folds away for easy storage
- Easy single person coupling
- Maintains NCAP Safety features
- Discreet when removed

**NEW FEATURES**

- Anti Binding Release Levers
- EZ Lock Attachment System
- Stronger components
- Stays retracted for storage
- NEW Improved Design Lynch Pins
- NEW Cable Holding System
- NEW Design Stainless Drawbars

**FEA & Destruction Tested**

Structure & components subjected to extreme loads.





## Nothing

*Zip. Zero. Zilch. Nada.*

That's what you have to do to connect an disconnect InvisiBrake. There's nothing to take in and out of your towed vehicle and there's nothing to push, pull, set, adjust, activate or deactivate.

What could be easier than nothing at all?



## What is InvisiBrake?

InvisiBrake is a fully-automatic, pre-set, progressive supplemental braking system that uses the electrical connections already in place on your towed vehicle (the towed vehicle's electrical harness) to brake when you brake the motorhome - the same electrical signal that activates the towed vehicle's brake lights also activates InvisiBrake.

### ■ Completely out of sight

InvisiBrake is so small it can usually be mounted under a seat without sacrificing any of the vehicle's usable space.

### ■ Progressive braking

When you continue braking, so does InvisiBrake. The longer you apply the brakes in the motorhome, the harder your towed vehicle will brake. InvisiBrake will NOT skid your tyres.

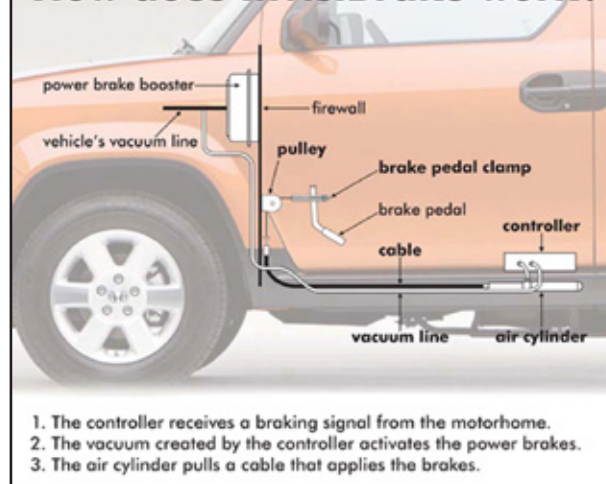
### ■ Trickle charge the battery

InvisiBrake connects directly to the towed vehicle's battery and constantly charges the battery during towing - InvisiBrake will never drain the battery.

### ■ Two-stage motorhome monitor

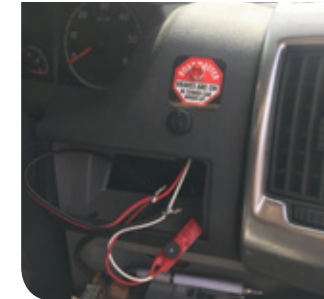
InvisiBrake includes an LED monitor for a visual reference of braking activity; an audible alert at the motorhome indicates extended braking to warn you if the brakes have been activated too long.

## How does InvisiBrake work?



### Other great benefits

- Hidden from view - as the name implies, InvisiBrake is hidden once installed. There's no unsightly equipment to see in your car.
- Simple operation - works intuitively. No fuss, no hassle.
- Power brakes - InvisiBrake engages the power braking system, giving you the same power brakes whether towing or driving.
- Activates only when the motorhome's brake lights illuminate - no false braking!
- Works in virtually any towed vehicle, including those with 'active' braking systems
- Includes an emergency break away system
- Easily adjusts to individual braking preferences - braking pressure is adjustable from 5 to 85psi.



### The ten key points of current legislation for trailers with axles greater than one metre apart (all towcars).

1. A minimum braking efficiency of 50% across all four wheels must be achieved.
2. The braking efficiency must be met for any deceleration of greater than 2 metres per second.
3. If the trailer (towed car) has vacuum/electronic or assisted brakes then the system must be operable.
4. The towcar must have a means of applying the brakes across all wheels if the towcar becomes detached from the motorhome to achieve a deceleration of 2 metres per second.
5. The towcar must have legal lights displayed at the rear to match the towing vehicle.
6. The towcar must be identified as a trailer by displaying reflective triangles and the towing vehicles number plate.
7. There should be no movement of the coupling or A frame.
8. Powered braking systems must have a sustainable power supply from the tow vehicle.
9. The towcar must be able to reverse without brake drag.
10. The motorhome must have no manual controls or adjustment in the cab for the tow car braking system other than normal brake pedal application.

#### Inertia Couplings

Inertia couplings are fine for and often used with single or multi axle trailers or caravans with axles closer than 1m apart. They are not suitable for a Tow Car that has axles greater than 1m apart and will not meet the legislation criteria highlighted in points 1,3,4,7, and 9.

#### Portable Braking Systems

These systems can often provide a great deal more pedal pressure than perhaps a human foot. The portability and cheaper cost of these systems may seem appealing. However these systems would not normally meet point 3, 4, 8 and sometimes 10 listed above.



### UNECE Regulation 13. breaches to look out for:

1. No means to apply the brakes if the vehicle detaches from the towing vehicle
2. Adjustment or control over the trailers braking from the cabin of the towing vehicle
3. Movement in the towing frame whilst towing (Inertia system)
4. Power assisted brakes on trailer not operable (vacuum servo not working)
5. Power supply (towcars battery) for braking system not maintained by towing vehicle
6. The towcar must NOT have brake drag when reversing (a common problem with inertia systems)
7. 50%+ Braking efficiency not being achieved across all 4 wheels







### Am I legal in UK?

The UK department for transport recognise a towcar on an A-frame as a trailer.

Therefore a towcar is a trailer and must comply with European trailer legislation.

These include: UNECE Regulation 55 for couplings, UNECE Regulation 13 for braking and Statutory Instruments Road Vehicle Lighting Regulation 1989 No.1796 and its amending directives for lighting requirements. UNECE Regulation 13 was effective from November 2014, and is the legislation that most traditional A-frame systems struggle to meet.

There are many small technicalities, of which cause many systems to be non-compliant but the biggest two requirements are: You must achieve a minimum of 50% braking efficiency across all four wheels.

If the trailer has power/vacuum-assisted brakes then the system must be operable.

**If your A-frame system complies with the current trailer legislation, then you are legal in the UK.**

### Am I legal in Europe?

Countries like Spain and Germany have local laws that state you may not tow a motor vehicle with another motor vehicle unless an authorised break down vehicle. To avoid rope towing etc.

1. You will not be towing a motor vehicle. You will be towing a car that is converted to a trailer. That complies with all European trailer legislation. That is identified as a trailer by the reflective triangles, the towing vehicles number plate, the brakes operated solely by braking in the towing vehicle, and the lights duplicating that of the towing vehicle.
2. Their local laws (Not European Laws) Apply if you are a resident and have lived there greater than 6 months, or if your vehicle is registered in that country. In which case A-frame towing would be illegal.
3. If you are travelling/holidaying for less than 6 months in that country then: No state has the power to reclassify a vehicle travelling from another state. As a visitor from another state you are legal under the powers of international traffic as defined in the Vienna convention, as long as your combination of vehicles are legal in your home country (see opposite).
4. Your local police officer may not be familiar with international traffic and far more familiar with their local laws, and as such it is possible you may get stopped. This is why we provide translated documents explaining what you are towing and its legality, to produce if needed. The reality is that far fewer people are stopped than is made of by gossip and internet posts. And often these people that are stopped are either, not compliant and therefore rightly stopped, or stopped for some other reason.
5. Despite installing hundreds of A-frames each year, we have only ever known of one of our customers being stopped abroad (in Spain). It was because they had a brake light out on their towcar. After the light was sorted and the police officer was shown the braking system working, they were permitted to continue without a problem.

Another was the Mont Blanc Tunnel, which upon presentation of their provided international traffic documentation, were permitted to continue. The truth is we get far more reports of successful trips passing numerous authorities without being stopped. The law is on your side if you do things properly.

**As a holidaymaker staying less than six months in a European country YOU ARE LEGAL provided your A-frame system complies with the required trailer legislation to be legal in UK.**

## Current fitted vehicles

Make/Model	Year	Approx kerb weight Kg	Manual	Automatic
Citroen C1	2005-2014	805	✓	✓
Citroen C1	2014-	840-865	✓	✓
Citroen Nemo	2008-	1090-1330	✓	
Fiat 500	2007-	865-980	✓	✓
Fiat 500 Abarth	2007-	865-980	✓	✓
Fiat Panda	2012-	940-1115	✓	✓
Fiat Panda Cross	2015-	1090	✓	✓
Fiat Qubo	2008-	1090-1330	✓	✓
Ford Fiesta	2013-2017	1113-1207	✓	
Ford Fiesta	2018-	1000-1100	TBC	
Ford KA	2008-2013	870	✓	
Ford KA+	2014-	1013	✓	
Honda Jazz	2015-	1073-1124	✓	
Hyundai i10	2014-	933-961	✓	
Hyundai i20	2015-2018	1158-1197	✓	
Hyundai i20 DCT	2018-	1158-1197	✓	✓
Kia Picanto	2012-2016	935-959	✓	
Kia Picanto	2017-	935-959	✓	
Mazda MX5	2015-	1050-1075	TBC	
Peugeot 107	2005-2014	805	✓	✓
Peugeot 108	2014-	840-865	✓	✓
Peugeot Bipper	2008-	1090-1330	✓	
Renault Twingo	2015-	864-1001	✓	
Seat Mii	2011-	929	✓	
Skoda Citigo	2011-2017	854-865	✓	
Skoda Citigo	2017-	854-865	✓	
Skoda Fabia	2015-	1004-1318	✓	
Smart For Two (451)	2007-2015	750-820	✓	✓
Smart For Two (453)	2015-	880	✓	
Smart For Four	2015-	995-1025	✓	
Toyota Aygo	2005-2014	805	✓	✓
Toyota Aygo	2014-2017	840-910	✓	✓
Toyota Aygo	2018-	840-910	✓	✓
Toyota IQ	2008-2015	860	✓	
Toyota Yaris	2011-2014	1040-1158	✓	
Toyota Yaris	2015-	1040-1159	✓	
Vauxhall Viva	2015-	939	✓	
VW Up	2011-2016	929-1229	✓	
VW Up	2017-	929-1229	✓	

This list is subject to change - please see our website for our up to date list of vehicles.

## Why Use An A-frame?

Many places we like to visit in our motorhomes are not always that suitable for large vehicles. There may be narrow streets, limited parking, height restrictions, expensive parking and more that are inconvenient for the motorhomer.

Using a towcar can give you the freedom to explore, without any of the listed problems above and without having to disturb your pitch set up. Also useful for sites that do not have reserved pitches.

Some may say it's a bit like caravanning, but the difference is that instead of having to buy an expensive vehicle that is large, heavy and fuel thirsty. You can have the benefit of a small easy to park, cheaper to buy and fuel economic vehicle, that is beneficial for your day to day use, and you can still just use the motorhome on occasions that you do not require a towcar.



## Towcar A-frame vs Trailer?

A Towcar A-frame is much more stable to tow with its widely separated axles, when using the cars braking system the towcar has a far superior braking efficiency over a trailer and has no pushing and pulling effect, or yawing on the motorhome.

A Towcar A-frame also has a lower centre of gravity and is unlikely to snake like a trailer could. However it is a conversion to that vehicle alone and cannot be used with another vehicle that has not been converted. So if you change your towcar regularly a trailer may be the most cost effective solution.

Trailers have a higher centre of gravity, less efficient brakes, are prone to snaking, are more to store at home and away, and are more to maintain. However they do offer the benefit of being able to take a different car. In fact any car that fits the trailer without the need for any converting of the vehicle.

Ask us about our other product ranges.



Local Dealer:

LNB Towbars & Vehicle Extras Ltd.  
Telephone 0117 9694955

[www.LNBLeisure.co.uk](http://www.LNBLeisure.co.uk)