

NTTA trained approved Tow bar installation

Tow A Frame

A-FRAME TOWING

SMARTBOXDUO ELECTRONIC VACUUM
POWER BRAKING SYSTEM

TOW BAR INSTALLATIONS

TRAILERS



[Double LOCK]

ABOUT US

Tow A Frame

We are a small but dedicated team involved with both TowAFrame Electronic braked A frame systems (since 2010) and Smart-Trailers (Since 2002), offering car trailers for all vehicles.

We have over 25 years combined experience in the towing and Automotive industry. Our first venture into supplying trailers was in 2002 and was our first entry into the market with the original Smart-Trailers XCountry (short for Cross Country) closely followed by the Brooklands Trailer with sliding ramps. We formed Half Moon Bay (Leisure) Ltd in 2004 as the holding company for Smart-Trailers (and Bantam trailers) and TowAFrame (Formerly Smart-Tow).

In 2010 We saw the advantages of the American Electronic braking systems for A frame towing and became the UK sole distributor for the Smartbox-DUO, power braking system manufactured by SMI manufacturing currently owned by Demco group USA.



We use trailers, caravans, motor-homes and A frame cars regularly and know what it is like to be the end user, and can offer good insight as we can offer both A Frame and Trailer solutions. In March 2020 we trained and are now NTTA approved tow bar installers and can quote for your motorhome Tow Bar requirements.

Our A frames, inserts and pins are proudly designed and manufactured in the UK. We have a close working relationship with our local suppliers and manufacturers and we are keen to support our local businesses as they support us. Some of our install centres are motorhome owners; most run their own business and we aim to maintain a great working ethos with integrity and pride with all of our partners.

*Mike Northeast
Director
TowAFrame Ltd.*

SmartBoxDUO BY DEMCO

Quick And Powerful
Dual Signal Activation
Proportional Braking



DOT approved OE spec
3/8' rubber hose

Electronic
emergency
breakaway unit

[Smartbox-DUO]
vacuum pump



DOT approved
200 psi
brake pipe

Diodes and
wiring
connectors

G force
motion sensor
(Unique Dual
Sensing design)



Pneumatic
brake actuator –
Fast and Powerful
actuation

[Tow TOUGH] A-FRAME

FITTED PRICE

£2799.99

[TOUGH]

£2899.99

BAG AND SPARES DEAL

[Tow TOUGH] MANUAL leg
lightweight ruggedized A Frame

Optional Locking Hitch Rrp **£34.99**

Easy To Use | Rated Up To 1300 Kg | Tested to 5000 Kg

Weighs Only 8 kg

*AL-KO Type approved hitch unit –
rated at 1600kg*

*Passivated zinc finish
protects against
corrosion*

*Electrical cables routed through
headstock mounts – simple, neat
and secure*

*Conspicuity tape
for better visibility*

*Folded length
only 80cm*

*Extended length
110 cm*

The [Tow TOUGH] Lightweight manual A frame weigh 8kg, its simple tough box section tube design is manually extended for towing and manually retracted after use, simple, easy to use, lightweight – with a passivated zinc protective finish.

*Note you can reverse with TowAFrame system but it is only for emergency use only –
extended reversing may cause non warranty damage the system*

[Tow GLIDE] AUTO ALIGN A-FRAME

[Double LOCK!]

FITTED PRICE

£3199.99

[GLIDE]

£3299.99

BAG AND SPARES DEAL

[Tow GLIDE] TELESCOPIC leg
Self aligning A frame

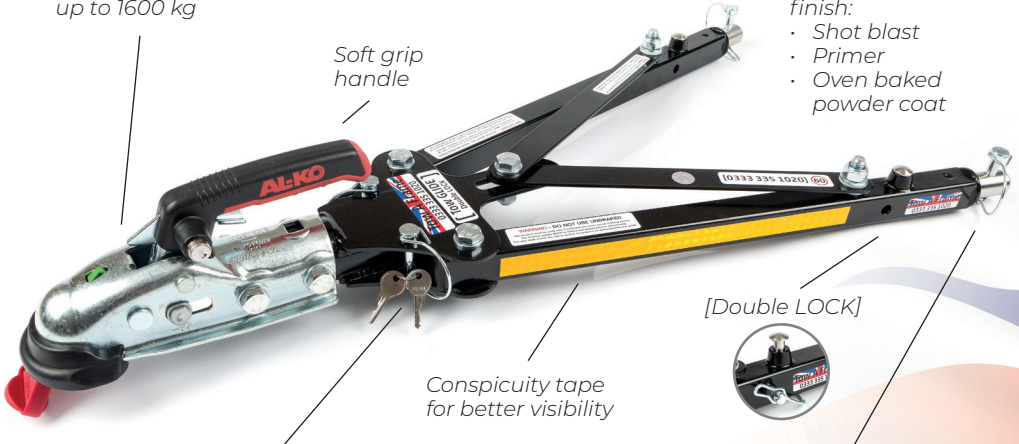
Optional Locking Hitch Rrp **£34.99**

Telescopic Legs | Rated Up To 1300 Kg | Tested to 7100 Kg
Weighs Only 9 kg

Quality **AL-KO** type approved
hitch unit with Soft Dock – rated
up to 1600 kg

3 process
powder coated
finish:

- Shot blast
- Primer
- Oven baked powder coat



Soft grip
handle

[Double LOCK]

Conspicuity tape
for better visibility

Electrical cables routed through headstock
mounts – simple, neat and secure

Telescopic
stainless steel legs

Folded length
only 80cm

Extended length
110 cm

The sliding legs allow the Tow hitch to be movable, You simply move the tow hitch to the tow ball and connect. Once connected you pull away carefully and the legs will extend automatically and lock into the extended position, you need to stop and check to ensure legs are correctly locked in the extended position and insert double lock pins before towing.

Note you can reverse with TowAFrame system but it is only for emergency use only – extended reversing may cause non warranty damage the system

Mandatory servicing requirements apply

[Tow BAG]

£119.99

Includes the following comprehensive spares and accessories set:

- The tactical bag and Comfort kit
- Spare D pins
- Spare Breakaway pin
- Number plate clips (Pr)
- Reflective triangles
- Grommets
- 20A fuse
- Gloves
- Tow WEDGIT (patent pending)

Durable Nylon Carry Bag And Essential Spares Kit



[Tow WEDGIT][®]

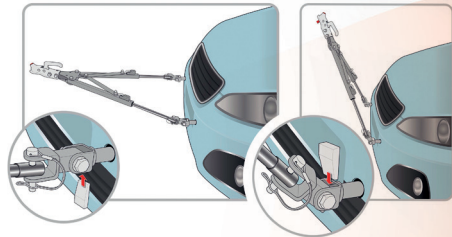
£19.99



Simple | Helping Hand | Patented Design

Introducing the [Tow WEDGIT] (Patented). It's a small device that locks the A frame joint in position holding the A frame about 20 degrees from horizontal allowing easier connection with one person. It is a simple block that locks the A frame in an elevated position – to allow you to drive up to the Towing vehicle with the A frame connected.

- To engage the lock horizontally – Slip the Tow WEDGIT[®] into the universal joint from underneath and release the weight on the A frame. The weight of the A frame in position will clamp the part in place holding the A frame about 20 degrees from horizontal, high enough for you to either drive up to the tow ball, or reverse the tow ball to the hitch.
- To release then simply lift the hitch up. Tow WEDGIT[®] will drop out – recover and store it ready for the next time.
- To Lock the A frame Vertically – disconnect any electrical leads and breakaway cable, lift the TOW hitch almost to vertical (12 O'clock) and insert the wedge from the top into the universal joint – release the weight of the hitch slowly ensuring the A frame



is locked at least 60 degrees from horizontal.

- To release lift the hitch a little and remove the Tow WEDGIT[®] and stow securely. You can either connect the A frame or remove the A frame.

TOW BAR INSTALLATIONS



Tow A Frame supply and fit towbars to motorhomes and campervans.

Please note! Motorhomes registered after April 2012 must, by law, be fitted with EC Type approved towbars as specified for use on your make of vehicle.

We fit top-of-the-range, quality towbars and electrical kits from the best UK and European manufacturers by Watling Engineering AL-ko, Witter, Tow-Trust, SMV and Memo. Quality products that will fit all Al-Ko chassis motorhomes and those with chassis extensions. These motorhome towbars are suitable for popular models such as Auto trail, Bailey, Elddis, Swift, Rapido, Roller team Tribute and Hymer plus many more.

We use vehicle specific towbar wiring as recommended by vehicle manufacturers to ensure your

vehicle is correctly setup for towing, all the requisite lighting is enabled and where enabled, suspension and braking adaptation are engaged when towing only when using with vehicle specific wiring kits.

We can, on request, supply, and fit fabricated, non-approved towbars, to motorhomes registered pre-April 2012.

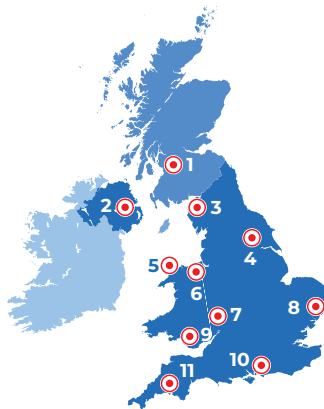


NTTA QUALITY ASSURED

We are NTTA (National Trailer & Towbar Association) trained to the highest level of know-how and expertise and are NTTA Members.

Most common motorhome tow bar installations require chassis extensions, the rear tow bar and the tow ball itself, and vehicle specific wiring kit

AUTHORIZED INSTALLATION CENTRES



1. City Tow Bars and Electrics



Bellshill North
Industrial Estate
Glasgow
ML4 3PS
07817 061 607
stephen@citytowbars-andelectrics.co.uk

2. Leisure Technical Solutions



Magheralin
BT67 ORH
02892698192
leisuretechnicalsolutions@hotmail.co.uk

3. JKS automotive



Row Brow
CA15 7JR
Dearham, UK
07970036730
sameng1@yahoo.com

4. Jacques Towbar & Leisure Services Ltd.



Fulford York
North Yorkshire
YO19 4RH
07742667681
mike@towaframe.com

5. Anglesey Towing



Rhosybol
Amlwch Anglesey
LL68 9PP
07799 181569
angleseytowing@gmail.com

6. Towbar solutions North Wales



Flint
CH6 5YU
01656 470029
07846 410250
martyn@towbarsolutions.com

7. MTec Project



Unit 2
Bromsberrow Heath
Business Park
Ledbury
HR8 1PG
07842 681288
rossharmer@hotmail.co.uk

8. Barley Green garage



Stradbrooke
Suffolk
IP21 5JT
07742667681
mike@towaframe.com

9. Towbar solutions South Wales



Wick van Centre
Waterton Lane
Bridgend
CF31 3YY
01656 470029
07846 410250
martyn@towbarsolutions.com

10. Towaframe



Copse lane
Hayling Island
PO11 0QB
07742667681 Mike
07742667682 Bobby
mike@towaframe.com

11. Ben McMullin BMC Towing South West



Callington
Cornwall
PL17 7TN
07539 672625
bmctowingsouthwest@gmail.com

A Frame Installed

Tow Bar installation

Mobile

Demo car Available

A FRAME KITS AVAILABLE FOR THE FOLLOWING VEHICLES

Any vehicle not on the list please ask.

MAKE MODEL	YEAR	KERB WEIGH (APPROX.)	MANUAL	AUTOMATIC	
Citroen C1	2005 – 2014	805	x	x	1. Keyless entry models require steering lock bypass kit – £149.99
Citroen C1	2014 –	865	x	x	
Citroen Nemo (Car derived van)	2007 –	1165	x		2. Brabus Models + 60kg
Fiat 500 ³	2007–	980	x	x	
Fiat 500 Abarth ³ (inc special editions)	2007 –	1065	x	x	3. Offset (too wide or low) OE tow eyes may be unsuitable. If so the kit will require 2 holes to be made in the panels for the system to be installed
Fiat Panda ³	2012 –	940	x	x	
Fiat Panda ³	2015 –	980	x	x	
Fiat Panda Cross ^{3,4}	2015 –	1060	x	x	
Fiat Panda 4 x 4 ^{3,4}	2015 –	1115	x		
Ford Fiesta	2013 – 2017	1100	x		4. Requires nonstandard beam to be used for flat towing purposes. Bespoke work supplement fee applies. HQ Hampshire for bespoke only.
Ford Ka	2008 – 2013	980	x		
Hyundai i10 ⁴	2007 – 2013	1040	x		5. Grill optional ornamental covers additional fee applies
Hyundai i10	2013 –	961	x		
Hyundai i20	2018 – 2020	1066	x		<p>Note; Vehicles with forward facing radar/ adaptive cruise control/ collision avoidance (or similar radar operated features) may require re-calibration +£299 to install on these models.</p>
Kia Picanto ⁶	2005 – 2011	945	x		
Kia Picanto	2011 –	960	x		
Peugeot 107	2005 – 2014	805	x	x	
Peugeot 108 ¹	2014 –	865	x	x	
Peugeot Bipper (Car derived van)	2007 –	1165	x		
Seat Mii	2011 –	929	x		
Skoda Citigo	2011 – 2017	910	x		
Skoda Citigo	2017 –	910	x		
Smart For Two ^{2,3}	1998 – 2007	760		x	
Smart For Two ^{2,3}	2007 – 2014	820		x	
Smart For Two ^{2,3,4}	2014 –	880	x		
Smart For Four ^{2,3,4}	2014 –	1001	x		
Toyota Aygo	2005 – 2014	810	x	x	
Toyota Aygo	2014 – 2017	910	x	x	
Toyota Aygo	2018 –	910	x	x	
Toyota IQ	2008 – 2015	860	x		
Toyota Yaris	2011 – 2014	1100	x		
Toyota Yaris ⁵	2016 –	1100	x		
Vw UP!	2011 – 2016	929	x		
Vw UP!	2017 –	960	x		
Vw UP!	2018 –	997	x		

NOTES ON LEGALITY

The UK Department for Transport classifies a car on a suitable A-frame with appropriate braking and lighting system as a trailer for UK law.*

Therefore a tow car is classified as a trailer and must comply with European trailer legislation including 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.

Many non UK countries have local laws that state you may not tow a motor vehicle with another motor vehicle unless it is an authorised recovery vehicle, to avoid inappropriate towing practices.

With a vehicle and suitable A frame system you will not be towing another motor vehicle. You will be towing a trailer as defined by the UK Department for Transport.

TowAFrame System complies with all European trailer legislation. The vehicle is identified as a trailer by:

- Reflective triangles mounted at the rear of the trailer unit.
- The towing vehicles numberplate

displayed at the rear of the trailer unit.

- The brakes operating when braking is required and meeting or exceeding braking requirements for trailers.
- The lights mirror that of the towing vehicle and comply with all current trailer lighting regulations.
- Local laws (Not European Laws) apply if you are a resident abroad or have a car registered abroad. HOWEVER as a UK visitor to those countries in a UK registered vehicle – the legislation that applies is still UK legislation as the vehicle is deemed as being in international traffic.
- No member state has the power to reclassify a vehicle travelling from another state. As a visitor from another state you are legally deemed to be in international traffic as defined in the Vienna convention on Road Traffic 1968.
- Local police officers may not be familiar with international traffic law, they are more familiar with their local laws, and as such it is possible you may get stopped. We provide translated documents in multiple languages explaining what you are towing – how the system works and its legality as defined by UK law.

* www.gov.uk/government/publications/a-frames-and-dollies/a-frames-and-dollies

TOWAFRAME POWER BRAKING AND DUAL SENSING

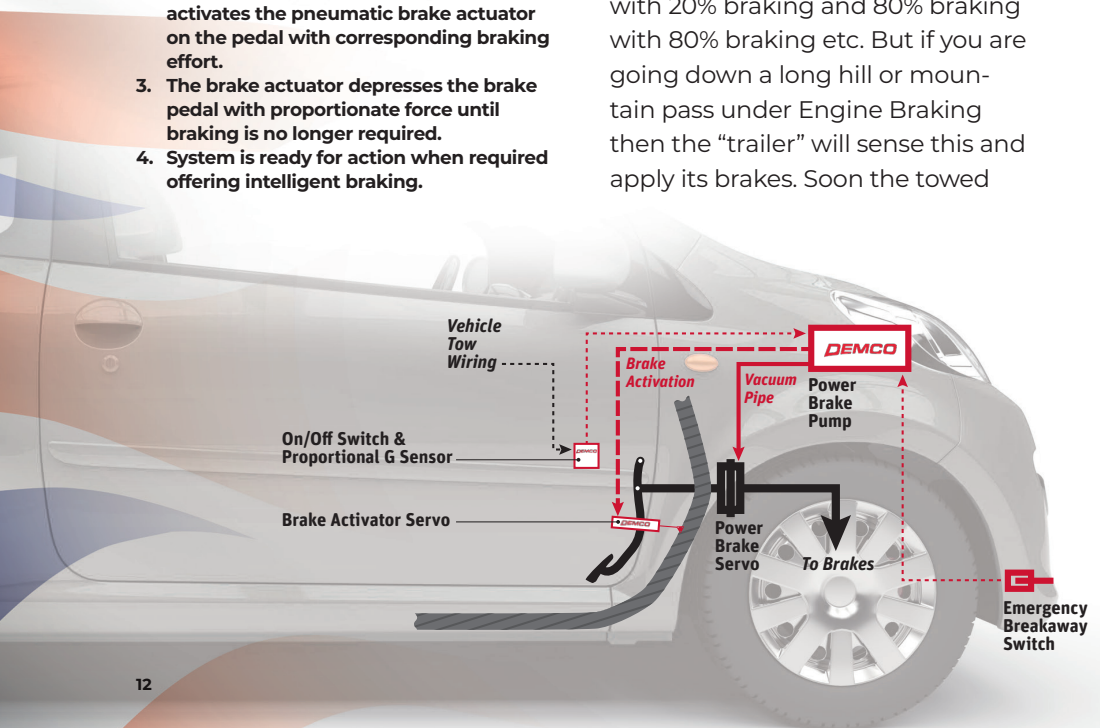
Unique **Dual Sensing** setup brakes only when braking is required (both stop light actuation AND the G force (motion sensor) are required to actuate braking.

Inferior system that works ONLY on a brake light signal from the

Motorhome will function on the slightest touch of the Motorhome brakes and will activate 100% of the towed vehicle brakes. There is no proportionality, the towed vehicle brakes are either ON or OFF. Very binary I/O and cannot react for every given situation.

1. The Brake light signal AND deceleration force activate the [Smartbox-DUO] pump.
2. Pump creates vacuum for servo and activates the pneumatic brake actuator on the pedal with corresponding braking effort.
3. The brake actuator depresses the brake pedal with proportionate force until braking is no longer required.
4. System is ready for action when required offering intelligent braking.

Inferior systems working ONLY on a signal from the G Sensor then you will at least get 20% braking with 20% braking and 80% braking with 80% braking etc. But if you are going down a long hill or mountain pass under Engine Braking then the “trailer” will sense this and apply its brakes. Soon the towed



vehicle's brakes will overheat and you could arrive at the bottom of the hill with smoking, burnt out brakes!

Only with **Dual Sensing** do you solve the problem. Under engine braking, although the G Sensor is sensing deceleration, the brakes will not be applied until you touch the brakes in the motorhome and provide the second signal to the system. Under light braking on the flat a 12v signal may be sent to the brake system but with little or no deceleration sensed the G Sensor will keep any braking safely proportional.

- Because our unique system features dual sensing – it offers proportionate braking effort. (Proportionate means it brakes as you do – gentle or hard it mirrors your braking effort).
- Pneumatic brake actuation means fast responsive braking response (1 second delay in braking at 60 mph = 88ft further travelled).
- DOT approved high pressure pipe AND large diameter 3/8 id Vacuum pipe (same as most vehicles) (Inferior systems with smaller ID pipe (1/8) reduces the volume of vacuum available for braking and the rate it can be replenished under load is diminished).
- Visible monitor in car optional.
- Tow A Frame braking system

tested on MOT brake test rollers passed the MOT brake efficiency test using only the TowAFrame emergency braking system.

- TowAFrame offer 24 month UK warranty as standard.
- The SmartboxDUO system has had many accolades from Motorhome Readers' choice Awards and substantiates our confidence in this product.
- 2014, 2015, 2016 Gold Award
- 2017 Silver Award



Our A frames, tow pins, threaded inserts, crash bar modifications fabrication and installations are all carried out in the UK – we value our suppliers as well as our customers.

Tow TOUGH tested to destruction at 5000kg, Tow GLIDE tested to Tow ball failure - testing halted at 7100kg Pull test

Calculating Towing rolling resistance, the formula for calculating pulling effort on the flat, on tarmac surface for a rolling vehicle is 1000kg car divided by 25, this formula gives = 40kg rolling resistance, this varies with gradient and how hard you accelerate, in addition surface type can make a big difference, Grass can be 1000kg / 4 = 250kg resistance. This product is designed solely for use on tarmac surfaces.

TRAILERS

FOR ANY VEHICLE



Our trailers all feature as standard:

- AI-KO axle 1300 kg rated (1500kg option available fee applies – the 1300kg is the max weight of the trailer (330kg) + the payload (970kg) – NB heavier vehicles will require either an upgraded axle or twin axle trailer)
- Chassis features holes for attaching ratchet strap hooks
- Chassis plate with trailer details, weight and unique chassis number
- EU type approval
- Front wheel chocks
- Full 13 pin electrics and lighting
- Galvanised steel chassis
- Jockey wheel (depending on the model it carries a nose weight reading showing how much weight is on the tow hitch)
- Kick down rear legs
- Slide out captive ramps
- Spare wheel
- Spring number plate securing mechanism
- Tow Hitch



*specifications may change without notice

PRICES

MAKE MODEL	BED LENGTH	PRICE	NOTES
Smart 451 / 453 For two Toyota IQ	9 ft. (2.7m)	£2699.99 + vat (£3239.99 inc vat)	330kg weight approx. (4025mm x 2230mm) <i>1300 kg rated single axle / 950kg load</i>
Classic Mini	10 ft. (3.03m)	£2749.99 + vat (£3299.99 inc vat)	330kgs weight approx. (4325mm x 2170mm) <i>1300 kg rated single axle / 950kg load</i>
Yaris twin axle	11 ft. (3.3m)	£3149.99 + vat (£3779.99 inc vat)	440kg weight approx. (4725mm x 2330mm) <i>Up to 1200kg load</i>
BMW Mini twin axle	12 ft. (3.6m)	£3199.99 + vat (£3839.99 inc vat)	440kg weight approx. (5010mm x 2330mm) <i>Up to 1200kg load</i>
		£3399.99 + vat (£4079.99 inc vat)	<i>Optional up to 1500Kg Load capacity</i>
Citroen C1 Fiat Panda Fiat 500 Hyundai I10 Kia Picanto Seat Mii Skoda Citigo Smart 453 44 Peugeot 107+108 Renault Twingo Toyota Aygo Vw Up	11 ft. (3.3m)	£2799.99 + vat (£3359.99 inc vat)	330kg weight approx. (4725mm x 2230mm) <i>1300 kg rated single axle 950kg load</i>

Note: rear engine models require the offset axle for better balance



OPTIONAL:

- Strap set
(4 x 50mm woven soft eye dolly ratchet straps)
£90.00 + vat (£108.00 inc)
- Centre decking
£200 + vat (£240.00 inc)
- Winch
£90.00 + vat (£114.00 inc)
- Alko compact hitch lock
£75.00 + vat (£90.00)
- Side mounted strap box
£89.99 + vat (£107.99)

4 Week lead time (built to order)

To be collected direct from manufacturing base on outskirts of Coventry

**TOWAFRAME + TRAILER WARRANTY
2 YEARS (24 MONTHS) AS STANDARD**

Tow A Frame

TOWAFRAME SERVICING

Full service must be carried out every two years
or 10000 towed miles whichever sooner.

Safety check and test must be carried out yearly
or 5000 towed miles whichever sooner

Tel 0333 335 1020, 0774 266 7681

Local call rate

Mike@TowAFrame.com

www.towaframe.com

Prices correct at time of print – subject to change