

Choosing The Right Towbar

New Zealand towing conditions are unique in the global towing market. With these conditions in mind Best Bars Ltd works closely with New Zealand's vehicle distributors to design towing product suitable for their vehicle's and consumer's needs.

All vehicles have a towing capacity advised by the vehicle manufacturer. All Best Bars manufactured towbars carry this detail on a tamper proof metal label adhered to the towbar tongue. This gives all braked, unbraked and tongue load data. All quality towbars should carry this detail as well as the towbar manufacturer's identification. Always tow within the vehicle manufacturer's weight specifications.

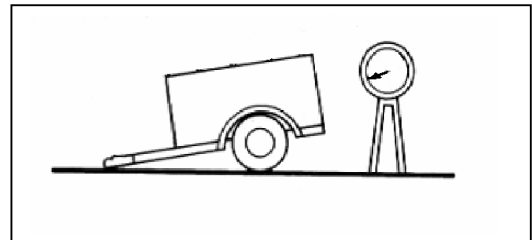
Common terms and definitions:

To further assist with correct operation we note some common term explanations.

Gross trailer weight (GTW)

This is the total weight of the fully loaded trailer.

The entire weight should be supported when determining the GTW. A commercial scale is the best means as found at testing and weigh-bridge stations. This method is shown in the picture to the right.



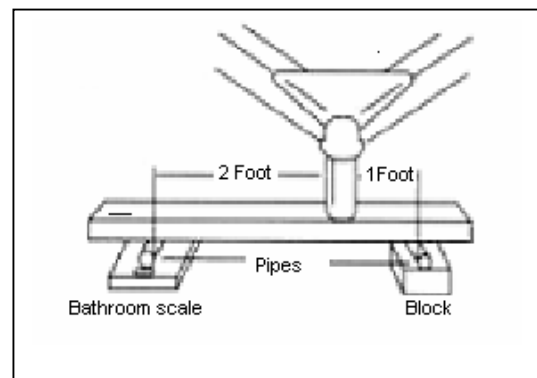
Tongue weight (TW)

Is the downward force exerted on the towball at the coupling.

For light trailers a normal bathroom scale, placed on a box to simulate the normal towbar height is suitable. If the weight is beyond the capacity of the household scale use the method pictured right and described below.

Place a household scale and block of same thickness three feet apart. Place a length of pipe on the scale and block as shown, then a beam between them. Zero the scale to account for the weight of the pipes and beam. Rest the trailer coupling on a stand on the beam one foot from the block. To obtain the tongue load multiply the result by three.

If the scales do not have the required capacity, space the block and scales four feet apart, place the trailer stand on the beam one foot from block and multiply the scale reading by four.



Note: The towbar's tongue capability is clearly displayed on the towbar label.

Tare

Vehicle mass without fuel (As it rolls off production line)

Kerb Weight

Vehicle mass fully fuelled – lubed –without payload

GVM (Gross vehicle mass)

Vehicle fully fuelled – lubed – fully loaded with payload. (This must include the driver, but does not include a trailer)

GCM (Gross combination mass)

Gross vehicle mass (from above) plus loaded trailer.

Light vehicle

A vehicle with a GVM of less than 3500kg. Generally no COF is required although some exceptions exist e.g. PSV (passenger service vehicles)

Heavy vehicle

A vehicle whose GVM exceeds 3500kg is classed as heavy vehicle. A class one licence will allow you to drive a vehicle if the laden weight (inclusive of trailer) does not exceed 4500kg. This means a minimum of a class 2 drivers license or higher is required if the laden weight at the time of driving (inclusive of trailer and load) is 4500kg or over up to a maximum of 12000kg.

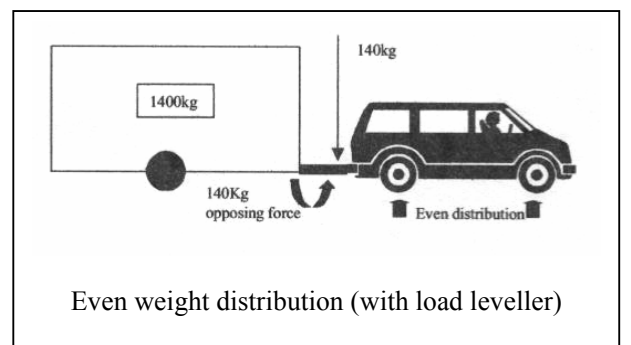
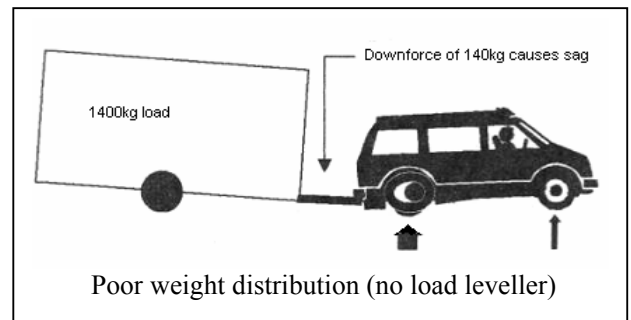
Load leveller

An accessory that attaches to the towbar and the trailer to aid in reducing sag of the vehicles rear when the trailer is attached.

Use of an effective load leveller system will provide a safer more comfortable towing experience by:

- Improving steering feel and control
- Reducing vehicle sway
- Transferring weight to front wheels for improved traction (Front wheel drive vehicles)
- Avoiding overloading of rear tyres
- Improving braking in normal and emergency braking situations
- Fits in 1 minute (following original installation)

A correctly adjusted load leveller should return the vehicle close to its original posture with the trailer attached. (as pictured right). This is done by transfer of downforce created on the towball, back to the front wheels improving control and braking.



Best Bars Ltd has a load leveller system available for use with selected approved towbars available through franchise dealers. Please contact your franchise parts dept or Best Bars Ltd direct for further detail.

General notes on towing conditions

- All vehicles must be operated within the manufacturers towing specifications.
- All vehicles must be fitted with a safety chain mount – a dual safety chain mount must be used if the trailer weight exceeds 2000kg. Cross the chains over the top of the tongue if required to ensure the drawbeam does not reach the ground if detached from the towball. Ensure enough slack chain is available to allow tight turns.
- Always ensure your coupling and ball size are matched – New Zealand uses a mixture of 1-7/8" & 50mm towballs and couplings. Mismatching sizes can be dangerous. For those towing a wide range of trailers with different coupling sizes, the best solution is the use of a quick-change dual towball system. Best Bars Ltd has the Convert-A-Ball system available which allows the change of your towball size in 10 seconds without the use of tools.
- Loads above 3500kg cannot be towed with a towball. In cases over 3500kg a pintle system is required. These systems are available from Best Bars Ltd who are authorised manufacturers of heavy-duty towbars beyond 3500kg capacity.
- All trailers with a total (loaded) weight of 2000kg or more must have trailer brakes fitted. Various systems are required for different loads ranging from a basic over ride brakes to a full electric system.
- The maximum trailer towing speed is 90 km/h
- When towing your loaded trailer, you must be capable of stopping within seven metres from a speed of 30km/h. (This is a guideline only)
- When using a trailer you are not familiar with, ensure the ball and coupling match in size. There are three sizes of tow balls commonly in use:

The 1 7/8 inch towball

The 50 mm towball

The 2 5/16 inch towball (only used on larger trailers)

- Should you have the need to tow both sizes, quick-change dual size towballs are available in the form of a Convert-A-Ball from Best Bars Ltd.