

# Light Vehicle Guide to Loading and Load Restraint

# **General Safety Information:**

This guide has been produced to assist you to understand your obligations and relevant standards under the law. It is always your responsibility to ensure your vehicle, and the load restraint system used, is adequate for the load under the law. Compliance to the law is your responsibility.

The driver of a light vehicle has the legal responsibility to ensure that all loads are securely carried and comply with the legal requirements:

- Stays on the vehicle during normal operating conditions.
- Doesn't negatively impact the stability or control of the vehicle.
- Doesn't protrude from the vehicle and can be appropriately restrained.
- You should pick up any fallen load if safe to do so, or arrange someone to retrieve it for you.
- The vehicle and trailer (where applicable) must be of a condition that is 'fit for purpose'
- Baines reserves the right to refuse loading vehicles which we deem not to be fit for purpose

# You Must:

- Ensure the vehicle is appropriate for the load and does not exceed the manufacturer's specifications of either the vehicle or the trailer (where a trailer is used). Vehicles have a specification plate which will declare a load and towing capacity. Please note that you need to consider added accessories, persons or other items in/on the vehicle as part of your load weight.
- Position and restrain the load so it does not affect the vehicles stability, steering and braking performance. Be aware that harsh braking actions may cause goods to shift in transit.
- Restrain the load; all loads must be adequately restrained with suitable load restraint equipment to prevent any forward, sideways, backwards or upwards movement. Loads should be suitably covered.
- Drive to the conditions: you have greatly increased your vehicles weight.
  Be aware of changed vehicle stability, steering, braking capabilities, allow greater braking distance and check load restraints during your journey.

# **Restraining your Load:**

The most common way to restrain a load is by direct restraint using tie down straps and angles:

- Rope is **<u>not</u>** considered to be a suitable tie down lashing tool.
- Suitable tie down straps and angles may be available for purchase from Baines Masonry.
- If unsure please ask for assistance.





Correct Lifting Technique Guide



Manually loading light vehicles is at <u>your risk</u> and should be completed in a safe way to minimise any possibility of injury. Following the Correct Lifting Technique guide below and wearing appropriate footwear will minimise your risk of injury.

These tips are a guide only to reduce the risk of injury when you are lifting:

- Keep a wide base of support. Your feet should be shoulder-width apart, with one foot slightly ahead of the other (karate stance).
- **Squat** down, bending at the hips and knees only. If needed, put one knee to the floor and your other knee in front of you, bent at a right angle (half kneeling).
- Keep good posture. Look straight ahead, and keep your back straight, your chest out, and your shoulders back, allowing your spine to maintain its natural curve.
- Slowly lift by straightening your hips and knees (not your back). Keep your back straight, and don't twist as you lift.
- Hold the load as close to your body as possible, at the level of your belly button.
- Use your feet to change direction, taking small steps.
- Lead with your hips as you change direction. Keep your shoulders in line with your hips as you move.
- Set down your load carefully, squatting with the knees and hips only.
- Do not attempt to lift by bending forward. Always bend your hips and knees to squat down to Keep in mind: your load, keep it close to your body, and straighten your legs to lift.
- Keep the load at a height between your hips and shoulders at all times.
- Never lift a heavy object above shoulder level.
- Avoid turning or twisting your body while lifting or holding an object.



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# **Tippers and Small Flatbeds under 4.5t GVM**





Drivers must know the GVM, tare weight and pay load.

### Loading by Fork Lift

Baines Masonry will load this vehicle with a forklift if you comply with this guide.

The load must be less than the pay load stated by the customer or as marked on the vehicles compliance plate. Multipurpose vehicles such as tippers are regarded as having medium friction- i.e. smooth steel on timber. When restraining loads the strap capacity will be reduced based on the angle of the strap.

# Assuming you are using 2500kg rated straps with a ratchet, you can use this table to ensure you use sufficient restraints

Height of Load Above Side Gate	Angle of Strap	Number of straps 300kgf Ratchet	Number of straps 600kgf Ratchet	Can Restrain
170-360mm	15°	1	1	150 kg
170-360mm	15°	2	1	310 kg
365-395mm	30°	1	1	300 kg
365-395mm	30°	2	1	600 kg
400-595mm	45°	1	1	420 kg
400-595mm	45°	2	1	840 kg
600mm +	60°	1	1	510 kg
600mm +	60°	2	1	1000 kg
600mm +	60°	3	2	1500kg

### Loading by hand

•• A truck body can contain a load, provided the load's centre of gravity sits under the side of the tray and is packed tight, but you still have to cover and restrain your load to prevent from upwards movement.

- •• If the centre of gravity is above the side of the truck tray, another load restraint system should be used.
- •• A truck tray or trailer is most effective if your load is firmly packed to reduce movement within the tray.
- •• Heavy items may need to be separately restrained with tie down or other direct restraint methods.



### **Cargo nets**

- •• Cargo nets are a <u>load rated</u> net that covers an open part of the vehicle and are to be used with load restraint equipment as secondary control measure as determined by the driver.
- •• They provide an effective restraint, particularly for open vehicles.
- •• Cargo nets can contain a load up to their rated capacity, as per the manufacturer's specifications
- •• Non-rated cargo nets are considered to be a tarpaulin

### Tarpaulins

- •• For most loads, tarpaulins or tarps are not effective restraint systems on their own.
- •• Tarps can be used in conjunction with another restraint systems, ratchet straps etc.



# **Trailers and Non-Commercial Vehicles**

The following guide is the maximum weight Baines Masonry will allow to be loaded in small vehicles under 4.5t GVM unless the driver can provide compliance to an increased capacity.

### Trailers

Trailers that are fit for purpose may be loaded with load sizes listed below

Trailer Type	Load Size	
Single axle unbraked	400kg	
Single axle braked	900kg	
Tandem axle braked	1200kg	
Custom trailers	To legal capacity	



Note: The driver needs to know that the towing vehicle has the capacity to tow the total mass, including the trailer and load mass as a complete combination.

### **Non-Commercial Utilities:**

Examples: Holden Commodore & Crewman, Ford Falcon Allowable Weight: **300kg** 



All of these vehicles are to be <u>hand loaded by the customer</u> to ensure even load distribution and protection from damage to vehicle.

•• A ute body can contain a load, provided the load's centre of gravity sits under the side of the tray and is packed tight, but you still have to restrain it from upwards movement.

•• If the centre of gravity is above the side of the tray or trailer, another suitable load restraint system should be used.

•• A tray or trailer is most effective if your load is firmly packed to reduce movement within the tray.

•• Heavy items may need to be separately restrained with tie down or other direct restraint methods and fastened to the correct lashing points.

### Cargo nets

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Other Non-Commercial Vehicles:Including but not limited to:Allowable Weight:200kg

All of these vehicles are to be <u>hand loaded by the customer</u> to ensure even load distribution and protection from damage to vehicle.



Sedans



Station Wagons



Hatchbacks



4WD Wagons



# **Commercial Utilities**

Examples: Single Cab, Extra Cab & Dual Cab Utes (Ford Ranger, Mazda BT50, Isuzu D-Max, Holden Colorado, Mitsubishi Triton, VW Amarok & Toyota Hi Lux)

Allowable Weight Limit: **700kg** (unless the driver can demonstrate the vehicle has a larger rated capacity, in which case we may load to a maximum of 80% of the legal payload).





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These two vehicle types may be loaded by forklift by Baines Masonry or hand loaded by the customer.



These two vehicle types must be hand loaded by the customer.





# Loading these vehicles by hand is the customers' responsibility.

•• A ute or trailer tray/body can contain a load, provided the load's centre of gravity sits under the side of the tray/body and is packed tight, but you still have to restrain it from upwards movement.

•• If the centre of gravity is above the side of the ute tray or trailer another suitable load restraint system should be used.

•• A ute tray or trailer is most effective if your load is firmly packed to reduce movement within the tray.

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