



# Electric Brakes fitted to Large Trailers

## Introduction

All trailers with a Gross Trailer Mass (GTM) exceeding 750kg and first registered after 30 June 1990 are required to be fitted with an efficient braking system. For trailers with a GTM of up to 2 tonnes, this braking system can be either an overrun system or one that is operated from the driver's seat.

For trailers with a GTM exceeding 2 tonnes, the braking system must be capable of being applied from the driver's seat - **overrun brakes are not acceptable**. In addition, the braking system must be such that if the trailer accidentally breaks away (from the towing vehicle), the trailer brakes will apply automatically and remain applied for at least 15 minutes.

It should be noted that the brakes must operate on ALL WHEELS (exceptions are trailers not over 2 tonnes Aggregate Trailer Mass (ATM) and trailers manufactured prior to ADR 38/--. Their service brakes must operate on all wheels on at least one axle).

## Installation of Equipment

To ensure the safe towing of trailers equipped with electric brakes, it is necessary that:

1. a breakaway switch is fitted to the trailer and its point of attachment is compatible with the towing vehicle;
2. the trailer is equipped with its own battery (of sufficient capacity to maintain the brakes in the applied position for at least 15 minutes);
3. the towing vehicle is equipped with an electrical circuit which will automatically maintain the trailer battery in a fully charged condition and is capable of warning the driver if the condition of the trailer battery is such that it may not be capable of meeting the above requirements;
4. earthing or grounding systems for the trailer brake units is specifically and individually wired (i.e. one earth wire to each brake unit) and not via the trailer suspension components, wheel bearings or tow couplings;
5. the trailer is fitted with a readily visible label stating that the towing vehicle must be equipped with a compatible control, charging and warning system.

### NOTE:

If the towing vehicle is subject to Australian Design Rule 31/-- "Hydraulic Brake Systems for Passenger Cars" or Australian Design Rule 35/-- "Commercial Vehicle Brake Systems" it is important to ensure that the towing vehicles' braking system will not be altered by the fitment of any control unit for the electric brakes. In particular, all dual circuit brake functions must be preserved.

# Registration

To be considered for registration a trailer equipped with electric brakes must, when presented for inspection, be connected to a hauling vehicle equipped as specified on page 1. If the hauling vehicle is not suitably equipped the trailer cannot be registered and a defect notice could be issued in respect of the towing vehicle.

After an electrically-braked trailer has been registered, it is important to check the operation of the breakaway switch and the condition of the battery regularly.

**REMEMBER TO RECHARGE THE BATTERY BEFORE USE IF THE TRAILER HAS NOT BEEN USED FOR A CONSIDERABLE LENGTH OF TIME.**

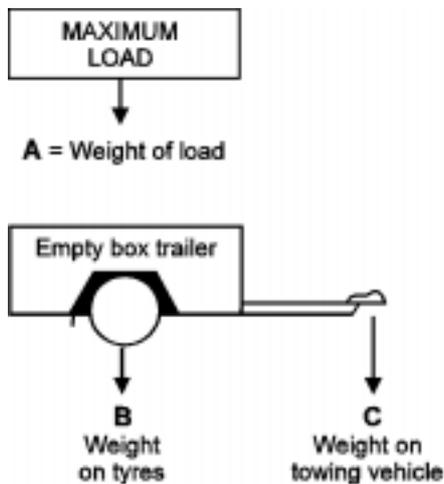
## Definitions

### Aggregate Trailer Mass (ATM)

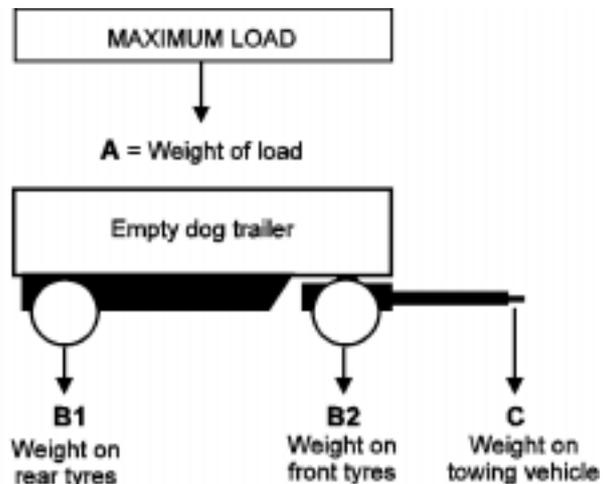
The total mass of the laden trailer when carrying the maximum load recommended by the manufacturer. This will include any mass imposed onto the drawing vehicle when the combination vehicle is resting on a horizontal supporting plane.

### Gross Trailer Mass (GTM)

The mass transmitted to the ground by the axle or axles of the trailer when coupled to a drawing vehicle and carrying its maximum load approximately uniformly distributed over the load bearing area.



$$\text{ATM} = \text{A} + \text{B} + \text{C}$$
$$\text{GTM} = \text{A} + \text{B}$$



$$\text{ATM} = \text{A} + \text{B1} + \text{B2} + \text{C}$$
$$\text{GTM} = \text{A} + \text{B1} + \text{B2}$$

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## FURTHER INFORMATION

### RTA Blacktown:

Vehicle Regulation Unit  
Level 1, 85 Flushcombe Road  
PO Box 558  
BLACKTOWN NSW 2148

Tel: (02) 9830 5555  
Fax: (02) 9831 0913

### RTA Wollongong:

Vehicle Regulation Unit  
104 Market Street  
PO Box 5398  
WOLLONGONG NSW 2500

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Fax: (02) 4225 8844

### RTA Charlestown:

Vehicle Regulation Unit  
Cnr Pacific Hwy & Frederick St  
PO Box 585  
CHARLESTOWN NSW 2290

Tel: 1 800 049 920  
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Fax: (02) 4921 0827

### RTA Parkes:

Vehicle Regulation Unit  
PO Box 334  
PARKES NSW 2870

Tel: 1 800 809 388  
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