

# BRAKING GUIDELINES

## BRAKE TYPES

### Disc Brakes

Disc brakes are a rugged, low maintenance braking option and are suitable for all braking applications. They are available marinised and can safely be submerged in water. Available as mechanical or hydraulic systems.

### Drum Brakes - Hydraulic

Hydraulic drum brakes are an economical and effective braking option. Although not as efficient as disc type brakes, they are suited to use on a wide range of domestic trailers, caravans and horse floats, and provide a smooth, damped braking option.

### Drum Brakes - Electric

Electric drum brakes are an effective and efficient braking option. Used in both direct and indirect brake types, they are easily mated to a breakaway brake system. Independent, mechanical parking brake function can be added. Using the CM MagBrake Multi-volt Controller, the trailer can be towed by any 12V or 24V vehicle, MagBrake Controllers are only suitable for trailers 0 - 2500kg.

## HOW ELECTRIC BRAKES WORK

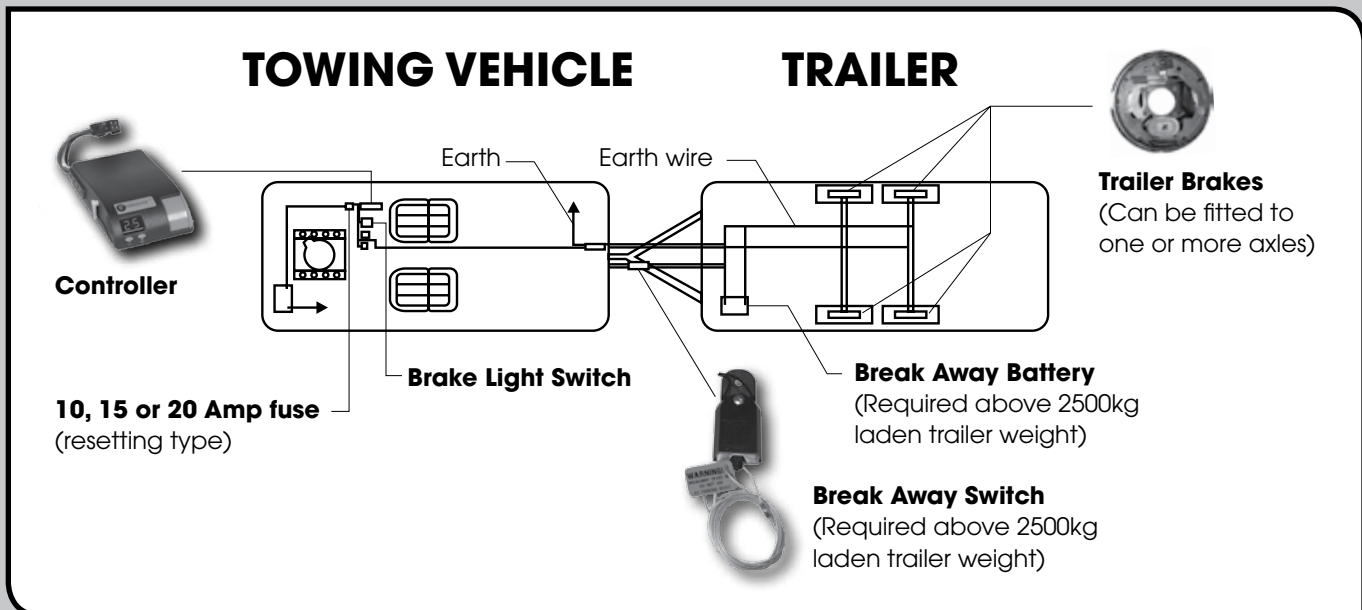
**When the towing vehicle's brakes are applied, the brake stop light switch activates the cab-mounted controller, a current is sent back to the drums energising the high capacity electro-magnets, which pull onto the inner face of the brake drum.**

Due to the rotation of the drum, the magnets move the lever arm in the same direction. This movement then activates the primary and secondary brake shoes. The more current that is applied to the magnets, the greater the force that is applied to the inner drum face, thereby increasing the braking effect.

The cab controller has a built-in adjustable resistor to increase or decrease the current to compensate for large changes in trailer weight and/or road conditions to maintain maximum braking efficiency. The controller also allows independent trailer braking without the need to apply the towing vehicle's brakes.

Suitable for a wide variety of applications, electric brakes are very cost effective, particularly when cab control and break away brakes are required (above 2500kg). See diagram below.

These brakes are easy to install.



## VEHICLE TOWING LIMITATIONS

Most towbars fitted to vehicles are rated according to the vehicle manufacturer's recommendations for towing capability. Towing trailers in excess of the vehicle manufacturer's recommendations may void both the vehicle

warranty and any insurance claim arising while towing that trailer. CM Trailer Parts strongly recommend that the vehicle manufacturer's rated towing capacity is at least commensurate with that of the laden trailer at all times.