



TECHNICAL

Tow Kit Compliance

Safety chains and cables must be fitted to all trailers without an emergency brake system (breakaway brakes) and all trailers with rigid drawbars (regardless of if they have emergency brakes or not). All states and territories refer to the Australian Design Rule (ADR) 62/012 – Mechanical Connections Between Vehicles. Although each state and territory describe the requirements differently, the fundamentals are the same.

Aggregate Trailer Mass (ATM)

ATM is the total mass of the trailer when carrying the maximum load recommended by the manufacturer. ATM includes the mass imposed on the towing vehicle when the combined tow vehicle and trailer are resting on a horizontal surface.

Trailer chain connectors must be rated to 1.5 x ATM of the trailer. Using hooks is legal provided their breaking strength is at least 1.5 x ATM and they are manufactured to a recognised standard. Hobson Engineering's tow kit components conform to AS/NZS 3776.

ADR 62/01 - Mechanical Connections Between Vehicles

The safety chain attachment must withstand the following minimum forces, separately applied, without incurring any breaks, cracks, separation of components or residual deformation that would interfere with or degrade the function of the assembly:

- Longitudinal tension (N) = 9.81 x 'ATM' (kg)
- Vertical load (N) = 0.5 x 9.81 x 'ATM' (kg)

Trailer ATM	Chain Size	Chain Break Load	Longitudinal Tension	Vertical Tension	Combined Tension	Tow Kit Size	Tow Kit Capacity	Compliance
			1 x ATM	0.5 x ATM	1.5 x ATM			
Up to 1600 kg	8 mm 4417 - 6	23.6 kN	15.7 kN	7.9 kN	23.5 kN	6 mm	44.0 kN	Complies
Up to 2500 kg	10 mm 4417 - 25	36.9 kN	24.5 kN	12.3 kN	39.2 kN	6 mm	44.0 kN	Complies
Up to 2500 kg	10 mm 4417 - 25	36.9 kN	24.5 kN	12.3 kN	39.2 kN	8 mm	78.5 kN	Complies
Up to 3500 kg	13 mm 4417 - 35	51.6 kN	34.3 kN	17.2 kN	51.5 kN	8 mm	78.5 kN	Complies

There is no legal requirement for the towing capacity to be marked on the hook or connecting link as the overall strength of the assembly is the critical consideration.

Similarly, there is no requirement for a specific colour to be used for the kits. Tow kit colour is supplied to manufacturer preference or market requirements.

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