

Trailer Towing and Using Rated Shackles

We have noticed in our travels over the past few months there is not a great deal known about shackles on trailers. When towing trailers, there are chains attached to the trailer to help tether it to the vehicle in case something severe happens like snapping the tow ball. The chains are connected to the car via D Shackles. The Australian Standard AS2741-2002 outlines how shackles can be used for towing. Shackles need to be stamped with a rating and have markings showing the manufacturers markings and WLL (Working Load Limit) Some points to consider when you hook up the caravan or trailer full of product or rubbish are,

- Are the shackles capable of doing the job?
- Are they damaged?
- Is it stamped and rated?

The chart below shows the guidelines stated for the minimum requirements for shackles attaching various loads to vehicles. We also recommend that people swap to the more versatile **Bow** Shackles as they can take side load. Normal D shackles are not designed to take side load and should only be used like an extra link in a chain, with the load going through the pin and the curved end of the D (see image below).

For Bow or D Shackles complying with AS 2741-2002

Trailer ATM (kg)	Minimum shackle Working Load Limit (WLL)(kg)	Minimum size of shackles (body diameter, not pin size)		
		Grade M (or 4) D shackle (mm)	Grade S (or 6) D shackle (mm)	Grade S (or 6) Bow shackle (mm)
0-1,000	250	6	6	5
1,001-1,600	400	10	6	6
1,601-2,500	625	13	8	8
2,501-3,500	875	16	10	10mm

The points highlighted are the ratings for the shackles which should be stamped on the shackle 875kg (X2 shackles the doubles for the WLL which should equal 3500kg as the load does not leave the ground).



Unrated D Shackle



D Shackle Rated



Bow Shackle



Side Loaded D Shackle