





# FAQs on Couplings / Secondary Couplings for Agricultural Vehicles

What are the legal limits for the various types of couplings?

Coupling Types	Image	Explanation
<p><b>Hook and Ring</b></p>		<p>Commonly used on agricultural vehicles in Ireland, usually limited to vertical loads <math>\leq 3,000\text{kg}</math> (i.e. downward force placed on the hitch by the coupling at the point of connection).</p>
<p><b>Pin and Eye</b></p>		<p>Usually used when drawing pieces of interchangeable towed equipment. Limited to vertical loads <math>\leq 3,000\text{ kg}</math>.</p>
<p><b>Ball and Hitch</b></p>		<p>Usually limited to vertical loads of <math>\leq 3,000\text{kg}</math> but may be approved for a <math>4,000\text{kg}</math> load (while complying with ISO 24347 and approved under ECE Reg. 55). Refer to plate on rear of tractor or contact original manufacturer for more information.</p>
<p><b>Secondary Coupling for agricultural trailers</b></p>		<p>An additional coupling to any of the above consisting of a safety chain or wire rope ensuring trailer remains attached to its towing vehicle if the primary coupling fails or becomes detached. Such couplings should be appropriately approved and rated.</p>

**What is a Coupling?** A device used to connect an agricultural tractor to a trailer or piece of interchangeable towed equipment.

**Coupling/Uncoupling a trailer?** This means connecting/disconnecting a trailer to or from a towing vehicle.

**What is meant by de-coupling?** Where any of the coupling types (Hook and Ring, Pin and Eye or Ball and Hitch) on a trailer become detached from the towing vehicle.

**What coupling is best for my vehicle trailer?** The RSA does not provide advice on a case by case basis. Please contact the original manufacturer / authorised distributor for the most appropriate coupling for your vehicle/trailer.

**What is my coupling rated for?** Most tractors will be fitted with a plate near the coupling device detailing the maximum load the coupling can carry. This plate illustrates that this particular coupling, when the towing hook is used, has been rated for a max. load of 3,000daN (3,059kg) and 2300 daN (2,345kg) when the drawbar is used at speeds under 40km/hr.

	UNDER 40km/hr	OVER 40km/hr
HOOK	S=3000daN D=91.3 KN	S=3000daN D=66.3 KN
DRAWBAR	S=2300 daN D=77.3 KN	S=2300 daN D=77.3 KN

SPEEDS  $\geq$  40KM/hr  
M9836

Dromone part No.: 405-00130-00

**What is a Breakaway Brake?** Is a braking device fitted to a trailer capable of automatically stopping the trailer if it becomes detached from the drawing vehicle whilst still in motion.

**How high should a single ball hitch and pin be from the ground?** Every vehicle is different and there is no specified minimum or maximum height in Road Traffic law. Please contact the original manufacturer / authorised distributor for advice specific to your vehicle. A coupling device should be mounted at the appropriate height to ensure the attached trailer remains level, as this helps with proper load distribution which ultimately improves stability.

**Is there any restriction on changing a trailers coupling from a standard 'ball and hitch' to a towing 'eye and pin'?** This work should be carried out or approved by the trailer manufacturer/authorised distributor. It is also important to ensure that the strength of the coupling is correct for the towing vehicle and trailer loads.

**What are the braking laws for agricultural trailers?** Please Refer to our FAQs on [Braking Laws for agricultural trailers and towed equipment](#).

