



The Fleetmaster Guide to Coupling and Uncoupling



- ✓ Check your Drivers' Handbook
- ✓ Check your Company Policies and Procedures
- ✓ If you are still unsure, speak to your Line Manager

Before you even start to couple or uncouple have you carried out a risk assessment? Do you know the potential risks and hazards you should assess prior to beginning the coupling/uncoupling process?

PPE

Are you wearing the correct PPE? Protective equipment is a must for your safety and the safety of others.



Authorised and Trained

Have you been trained, and are authorised, to carry out the coupling and uncoupling procedure?

Correct Driving Licence

Do you hold the required entitlements on your driving licence to carry out the work assigned?



The Environment

Are you parked legally and safely?
 Are there any hazards around you?
 Is the ground level and firm, can it take the weight?

Now that you have assessed that both yourself and the environment are safe and legal to carry out the coupling and uncoupling, you next need to ensure that the vehicle, the trailer and the equipment/load it will be carrying are too safe and legal.

The Vehicle

Ensure that the vehicle is safe and roadworthy by carrying out a vehicle check. Follow your company’s policy and procedure regarding vehicle checks and complete any vehicle check documentation.



The Trailer

You need to make sure the trailer is safe and roadworthy before starting the coupling process. Use your company’s check sheet to complete the trailer checks as per the Company Policy.

The Equipment / Load

Is the equipment / load safe and is it all present?

Once loaded, is it safe, secure and legal?

Have you loaded following your company policies and procedures for safe and secure loading?



IF you are certain that yourself, the environment, the vehicle, the trailer and the equipment/load is safe, legal and in line with your company policy – you can then begin the coupling / uncoupling process. These will be covered in the following pages.

The Road Traffic Act 1988 states that:

"A Person is guilty of an offence if he/she uses, or causes or permits another to use, a motor vehicle or trailer on a road when:

- a) the condition of the motor vehicle or trailer, or of its accessories or equipment, or
- b) the purpose for which it is used, or
- c) the number of passengers carried by it, or the manner in which they are carried, or
- d) the weight, position or distribution of its load, or the manner in which it is secured,

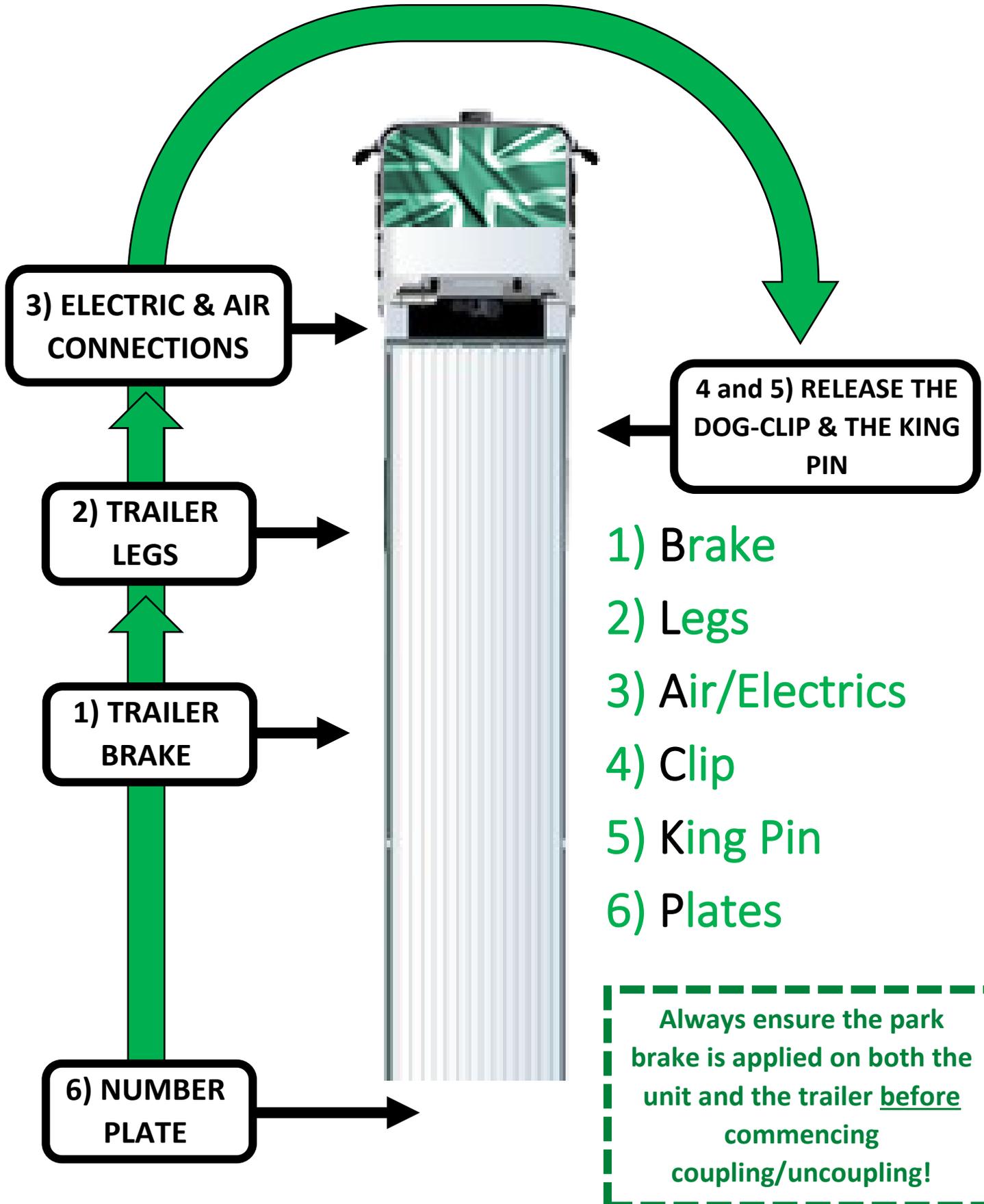
is such that the use of the motor vehicle or trailer involves a danger of injury to any person"

Regulation 100 of the Road Vehicles (Construction & Use) Regulations 1986 states that:

"1) A motor vehicle, every trailer drawn thereby and all parts and accessories of such vehicle and trailer shall at all times be in such condition ... and the weight, distribution, packing and adjustment of the load of such vehicle and trailer shall at all times be such that no danger is caused or is likely to be caused to any person in or on the vehicle or trailer or on a road.

2) The load carried by a motor vehicle or trailer shall at all times be so secured, if necessary by physical restraint other than its own weight, and be in such a position, that neither danger nor nuisance is likely to be caused to any person or property by reason of the load or any part thereof falling or being blown from the vehicle or by reason of any other movement of the load or any part thereof in relation to the vehicle."

Ensure engine is off and keys removed from vehicle when leaving the vehicle.



Brake Plates

L eg

A ir/electrics

C lip

K ingpin



When uncoupling, follow the 'BLACK-P' process.

<p>1 B</p>	<p>Ensure the vehicle's parking brake is applied, stop the engine and remove the keys. Ensure trailer parking brake is also applied.</p>
<p>2 L</p>	<p>Release and lower the legs.</p>
<p>3 A</p>	<p>Disconnect the airlines (yellow and red) and the electrical connections.</p>
<p>4 C</p>	<p>Remove the safety clip (dog-clip) and stow safely.</p>
<p>5 K</p>	<p>Release the kingpin handle.</p>
<p>6 P</p>	<p>Remove number plates from the trailer and stow away safely for when next needed.</p>

Then pull the vehicle forwards slightly so you are clear of the trailer pin.

Lower the air suspension.

Pull out clear of the trailer and level the suspension.

After this park the vehicle alongside the trailer.

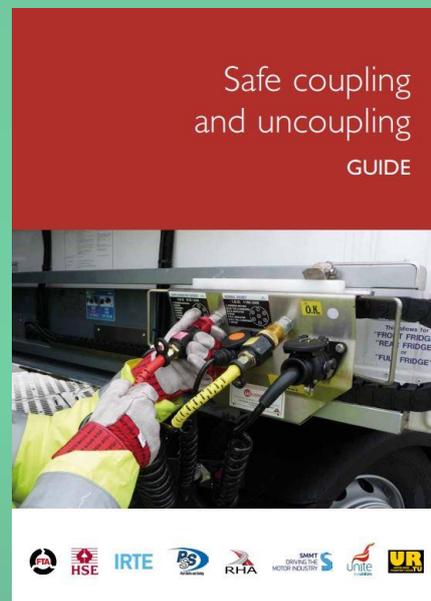
Then leave the vehicle secure (parking brake applied, out of gear, engine shut down and keys removed). Also, double check the trailer's parking brake is applied.



Click on the image below to view the Interpreting weight plates for light commercial vehicles guide.



Click on the image below to view the HSE guide on safe coupling and uncoupling.





Ensure that the trailer brake is applied. Complete a trailer safety check.

BRAKE

**LINE UP &
INSPECT**

Line up and reverse the unit towards the trailer. Stop short, apply parking brake, shut off engine and remove keys. Inspect the King Pin and rub plate. Make sure the 5th wheel jaws are open.

If fitted, lower air suspension, then reverse so the 5th wheel is under the trailer. Then raise the suspension and reverse until the 5th wheel jaws lock onto the pin. If there is no air suspension, then the trailer should be slightly lower than the unit so that the unit run up ramps raise the trailer whilst reversing so that the trailer's landing legs are not damaged in the process.

**ADJUST THE
COUPLING
HEIGHT**

**TUG TEST
KING PIN**

Check the King Pin is locked by carrying out a 'tug test'. Try pulling the unit forwards to ensure that the unit and trailer are locked together. When successful, apply the parking brake, shut off the engine, remove the keys and lock the Tractor unit.

Attach the Dog-clip (safety clip).

DOG-CLIP

AIRLINES

Attach the airlines (yellow and red) and electrical connections.

Raise the landing legs so they are not damaged in transit.

RAISE LEGS

**BRAKE &
PLATES**

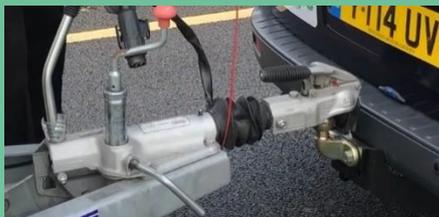
Disengage the trailer handbrake and make sure the number plates are attached to the trailer before setting off.

Slowly reverse vehicle in a straight line towards the front of the trailer (use spotter if possible).



Ensure the vehicle's parking brake is applied, stop the engine and remove the keys. Ensure trailer parking brake is also applied. Carry out a trailer safety check.

Make any necessary adjustments to the trailer coupling height using the jockey wheel.



Reverse under the trailer as shown in the image to the left. Complete a visual check to determine if you are positioned correctly. Remember to always stop the engine and remove the keys whenever leaving the vehicle.

Clip the breakaway cable to the towing vehicle as shown in the right image.



Lower the trailer, using the jockey wheel, until it clicks into place onto the towing ball. When in place, increase the height of the jockey wheel to test that the towing vehicle's rear end raises with it, showing that they are connected securely.

Level out the trailer and towing vehicle again, then raise and secure the jockey wheel so that it is not damaged whilst driving. Apply R-clip to jockey wheel.



Connect the electrics cable and then check the lights are in working order. If all electrics are working on the vehicle and trailer, ensure number plate is attached and remove trailer handbrake ready to set off.

Apply vehicle handbrake, shut off engine and remove keys. Apply trailer handbrake and ensure it is secure.



Remove the electrics cable and stow away securely.

Remove R-clip from jockey wheel and unlock then lift the hitch lock. Lower the jockey wheel and raise the coupling head until it is clear of the tow ball. Then lock jockey wheel in place with the R-clip.



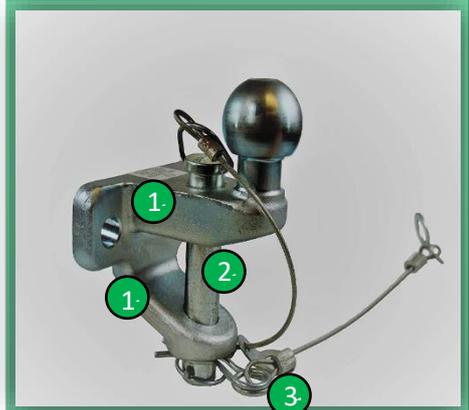
Disconnect the breakaway cable and stow away safely.

Drive slowly away from trailer with towing vehicle and then level out the trailer with the jockey wheel if necessary.



Test the trailer is braked and secure by hand. If you need to, chock the wheels.

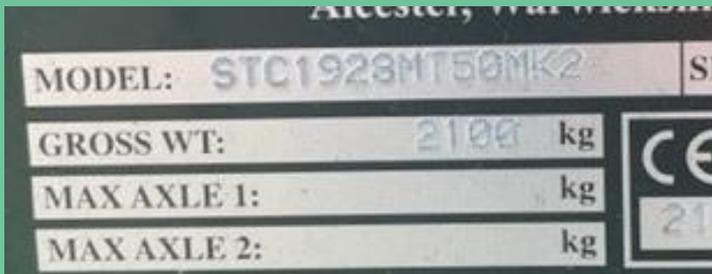
The coupling procedure for eye-shaft and pin is the same except instead of lowering the trailer onto the towball, you reverse into the jaws (1) and apply the pin (2). Make sure the pin can spin and does not catch on the sides. Once secure, apply the r-clip (3) for security (some will have 2 r-clips so make sure to apply them both).



You need to ensure that when you load up the trailer that you do not exceed the maximum weights for the trailer and the vehicle.
(Train Weight)

Ford Ranger Weight Plate (The Towing Vehicle)

MAM = 3270kg
 Train Weight = 6000kg
 Front Axle = 1480kg
 Rear Axle = 1850kg



Chipper Weight Info (Equipment/Load)

Gross Weight = 2100kg

Trailer Weight Plate

MAM = 3500kg
 Unladen Weight = 530kg



In the above example you can see an appropriate scenario relating to the weight being towed. The towing vehicle (Ford Ranger) has a Gross Train Weight of 6000kg and a MAM of 3270kg. The towing load (Chipper) weighs 2100kg and the Trailer's MAM is 3500kg (with an unladen weight of 530kg). The trailer can take the 2100kg of weight from the Chipper therefore, the Ford Ranger with a full MAM, the trailer unladen weight and the Chipper (3270kg + 530kg + 2100kg = 5900kg) all fall just within the Ranger's Gross Train Weight of 6000kg.

The Provision and Use of Work Equipment Regulations 1998 (PUWER)

PUWER requires that equipment provided for work use is:

- ✓ suitable for the intended use
- ✓ safe for use, maintained in a safe condition and inspected to ensure it is correctly installed and does not subsequently deteriorate
- ✓ used only by people who have received adequate information, instruction and training
- ✓ accompanied by suitable health and safety measures, such as protective devices and controls. These will normally include guarding, emergency stop devices, adequate means of isolation from sources of energy, clearly visible markings and warning devices
- ✓ used in accordance with specific requirements, for mobile work equipment and power presses

PUWER 1998 along with the Road Traffic Act 1988 and the Road Vehicles (Construction & Use) Regulations 1986 are just 3 regulations and legislation in place to keep all road users and workers safe. Failing to follow these regulations not only puts you and others in potentially **fatal** danger, but you would also run the risk of fines, lawsuits, licence suspension and even jail time.

July 2022 Changes

A new offence has been added where those who cause serious injury by dangerous driving can face a maximum of 2 years in prison, unlimited fines and an obligatory driving disqualification.

Also, those who cause death by dangerous driving will now face up to life imprisonment rather than the previous maximum of 14 years in prison.

If you fail to hitch the trailer and vehicle safely, securely and legally, you could potentially face up to life in prison dependant on the outcome of the incident.

Don't take shortcuts, don't take lives.



Good practice when coupling and uncoupling means that you ensure that:

- ✓ The ground is level and firm and will support the legs/wheels of the trailer.
- ✓ After uncoupling, you check that the legs/wheels are not sinking into the surface.
- ✓ You uncouple whilst in a straight line as this will make coupling easier.
- ✓ You understand that when in reverse a trailer that is jack-knifed is going nowhere. When this happens pull forwards and try the process again.
- ✓ The trailer will not cause an obstruction or hazard to other traffic.
- ✓ The trailer will not pose a danger to pedestrians.
- ✓ The trailer will not contravene any national or local traffic regulations.
- ✓ You lower the air suspension, if fitted, when the trailer is to be left for extended periods of time.
- ✓ The parking brake on the trailer is always applied before it is uncoupled from the towing vehicle.
- ✓ Whenever you exit the towing vehicle, you ensure the engine is shut off and the keys are removed from the vehicle.
- ✓ Always check the vehicle and trailer weight plate to ensure you are legal (VTG6).





You **must** avoid the below when coupling and uncoupling:

- ✘ Using the automatic application of the brakes caused by releasing the supply air-line (red) as the parking brake. This is not a fail-safe condition.
- ✘ Parking the trailer on soft ground. This could lead to the trailer sinking into the ground.
- ✘ Leaving trailers on an adverse incline, whether front, rear or sideways.
- ✘ Creating an obstruction or parking the trailer so it overhangs any vehicle routes or carriageways.
- ✘ Leaving trailers where coupling may be difficult.
- ✘ Leaving the engine running and the keys inside the towing vehicle when you are not inside of it.
- ✘ Begin the process if you have not completed a risk assessment.
- ✘ Begin the process if any element of your risk assessment has failed e.g. your towing vehicle is not roadworthy.
- ✘ Overload the trailer under any circumstance. (check axel and gross weights)
- ✘ Couple or uncouple without the parking brake applied on both the trailer and the towing vehicle.

Safety First

- ✓ Use a spotter if available
- ✓ Get Out and Look if in doubt (GOAL)
- ✓ Doing things the **right way**, is the **only way**.

