

SCANIA

Recovery instructions

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Recovery instructions

General

The information and instructions in this booklet must be followed when recovering or towing a vehicle. This to avoid both injury and vehicle damage.

Recovery should be entrusted to a recovery company authorized for heavy vehicles.

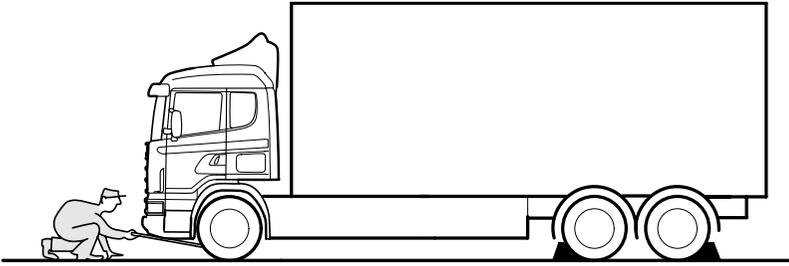
Recovery is always preferable to towing. Towing should always be carried out with a towbar.



Several vehicle functions are often disengaged or inoperative during recovery or towing. There is then a considerable risk that the vehicle could be set in motion without brakes in working order. Therefore, to prevent injury and vehicle damage, be sure to follow the instructions in this booklet.

Note: Additional measures must be taken when recovering or towing all-wheel-drive vehicles.

Refer to the "All-wheel-drive" booklet.



116 235

General chassis lifting points

Chock the wheels to prevent the vehicle from moving along while work is in progress. Make sure the jack is positioned firmly on a level surface.



Never work under a vehicle with air suspension unless it is fully safeguarded against dropping down in the event of a pressure change in the air bellows. There is otherwise a high risk of getting trapped with crushing injuries as a result.



Never work under a raised vehicle that is supported only by a jack. To ensure complete safety when working under a raised vehicle, both chassis and moving axle suspension components must be supported by axle stands. There is otherwise a high risk of getting trapped with crushing injuries as a result.

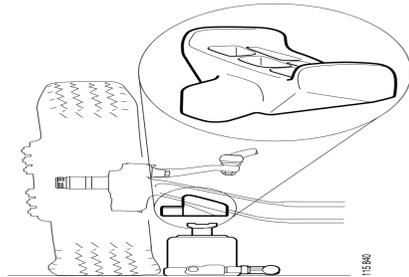
Chassis lifting points

IMPORTANT!

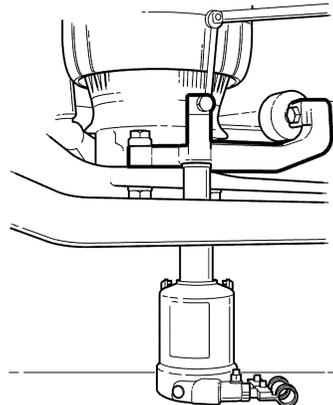
Position the jack only at the indicated lifting points. Positioning it elsewhere could cause serious damage to the vehicle.

Lifting points, front axle

- Use the adapter included in the tool kit, vehicles with leaf spring suspension.

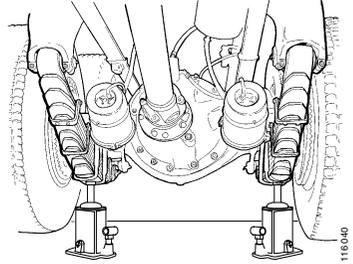


- At the bracket under the air bellows, vehicles with air suspension.

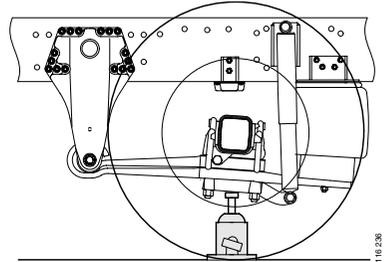


Lifting points, rear axle

- At the spring attachment, vehicles with leaf spring suspension.



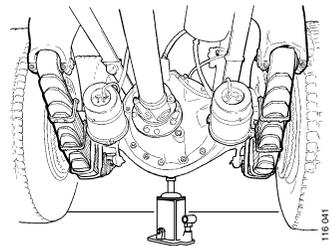
- At the spring attachment, vehicles with air suspension.



- Under the rear axle central gear.

IMPORTANT!

The vehicle must be unloaded.



Preparatory work

Before recovering the vehicle from a ditch its load must first be removed and all stones, rocks, etc. in the ditch that could damage or fasten in the vehicle when it is pulled out must also be removed.

Check that the vehicle has sustained no damage that could cause a short circuit in its electrical system. In such case, disconnect the batteries to avoid a fire.

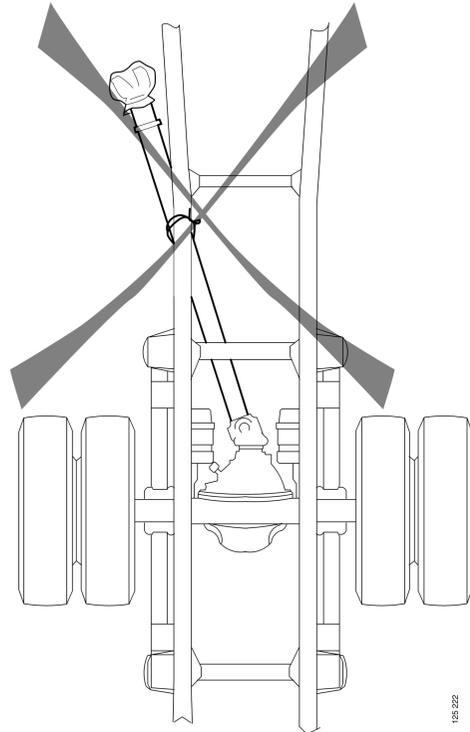
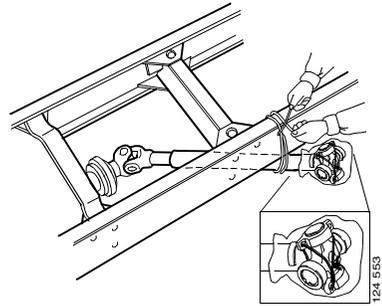
Loosen and remove the rear part of the front mudguards to prevent the splash guards from getting caught and pulling off the mudguards. Where possible, remove any other equipment that could be damaged during recovery.

When recovering on a road, always lift the vehicle without a load if possible. Alternatively, the front axle weight can be reduced as much as possible such as by lifting the tag axle, if fitted.

IMPORTANT!

The oil pump in the gearbox is not driven during towing and recovery. To avoid damage to the gearbox, the propeller shaft should therefore be detached from the rear axle central gear and secured to the frame. Refer to the "Propeller shaft" section.

If the propeller shaft is detached from the rear of the gearbox there is a risk of it rotating and damaging the cables in the chassis frame. There is also a high risk of the propeller shaft itself sustaining serious damage or breaking.

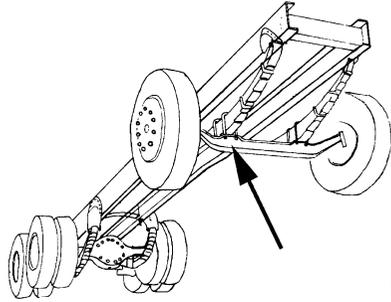


Recovery

Recovery from a ditch

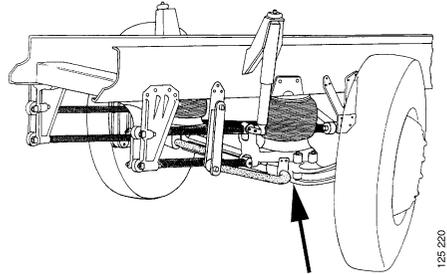
Vehicles with leaf spring suspension, front

When recovering the vehicle from a ditch the spring attachment on the front axle beam is a suitable towing point.



Vehicles with air suspension, front

When recovering the vehicle from a ditch the front axle at the air bellows attachment is a suitable towing point.



From the rear and from the side

When the vehicle is pulled backwards or sideways, it is best to attach the recovery equipment to the body frame as this is usually more rigid than the chassis frame.

Lifting an air suspended axle

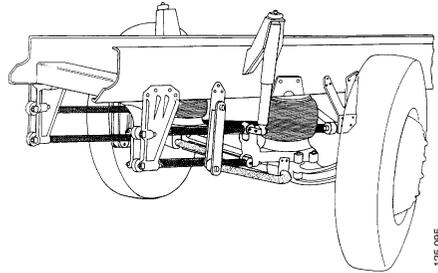
IMPORTANT!

A vehicle having a front axle with air suspension must never be lifted at the front attachment for the torsion bars. These attachments are not dimensioned for the lateral forces that occur during recovery operations.

The most suitable points for lifting the vehicle are at the wheels or the underside of the front axle at the attachment for the air bellows.

IMPORTANT!

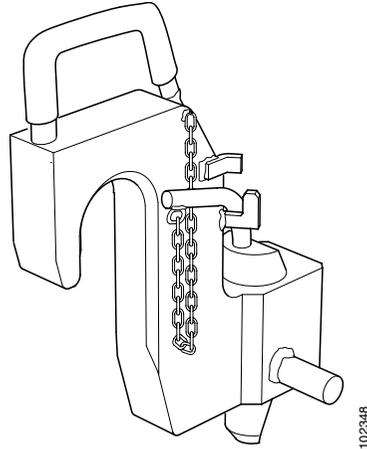
When lifting a vehicle having an axle with air suspension which is then unsupported, the automatic level control for the air suspension must be engaged or manually set to emptying of the air bellows. Otherwise the shock absorbers will be damaged. Alternatively, secure the axle with a chain or the like before raising the vehicle.



Recovery tool

When a vehicle standing on a level surface is to be recovered, Scania recommends the use of recovery tool 99 340. This tool is designed for lifting the vehicle. It should not be used if the vehicle to be recovered has a front axle weight in excess of 10 tonnes. The tool can be used on vehicles with leaf spring or air suspension. It is available from Scania importers or local dealers.

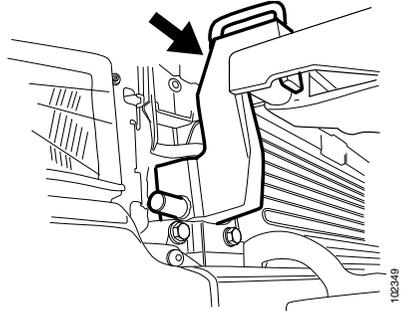
Do not lift directly on the towing brackets without using the tool. The towing brackets will break due to the incorrect distribution of forces.



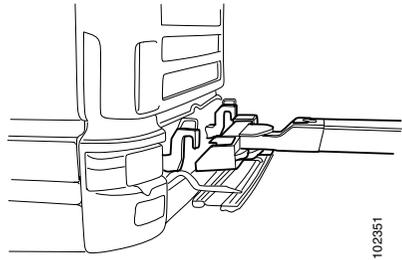
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Special tool, 99 340, used for recovery.

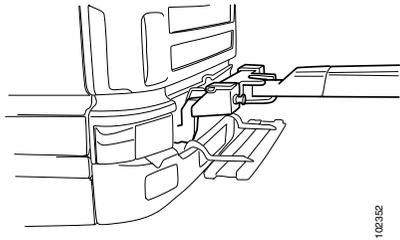
Attaching recovery tool 99 340



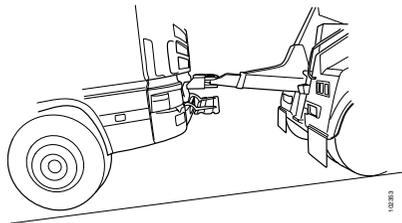
The recovery vehicle approaches the vehicle to be recovered.



The vehicles are connected.



The recovery vehicle lifts the broken-down vehicle.

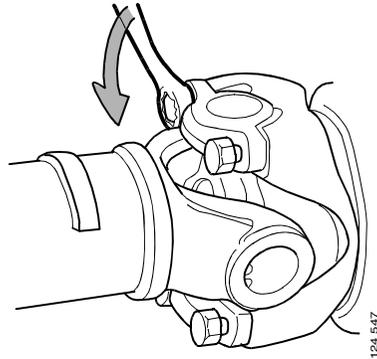


Propeller shaft

Detaching propeller shaft P300-P500

1. Apply the parking brake.

2. Loosen the bolts in the rear axle central gear but do not remove them.



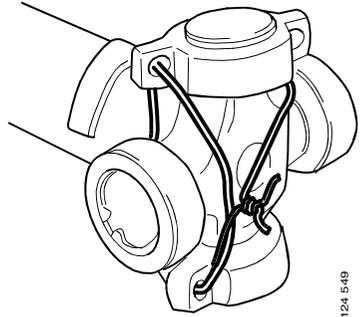
3. Prise loose the bearing retainers alternately on both sides using two screwdrivers.

124 548

4. Hold the shaft and remove the bolts. Tie the bearing retainers together on the universal joint spider so that they remain in place.

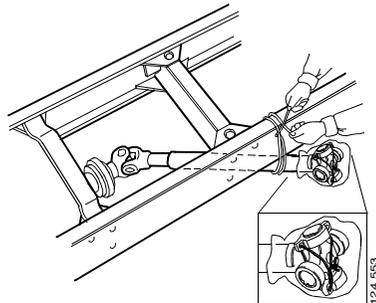
IMPORTANT!

If one of the bearing retainers falls off a new universal joint spider and new bearing retainers will have to be fitted. This is to avoid the risk of dirt getting into the joint.



124 549

5. Attach the shaft to the chassis and cover the universal joint with a plastic bag.

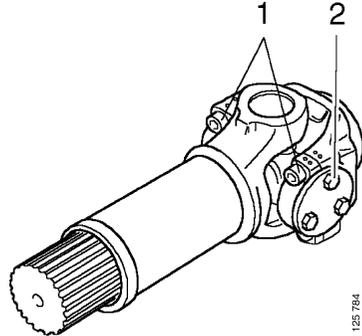


124 550

Propeller shaft

Detaching propeller shaft P600

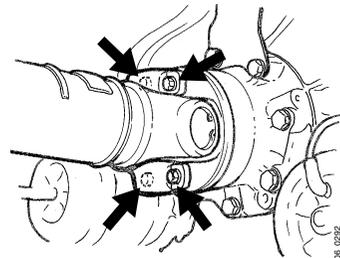
1. Apply the parking brake.
2. Unscrew the covers.
3. Loosen the bolts in the rear axle central gear but do not remove them.
4. Prise out the bearing caps alternately on both sides using two screwdrivers.



125 784

1. *Bearing cap bolts*
2. *Bolt in cover on end yoke*

5. Hold the shaft and remove the bolts.



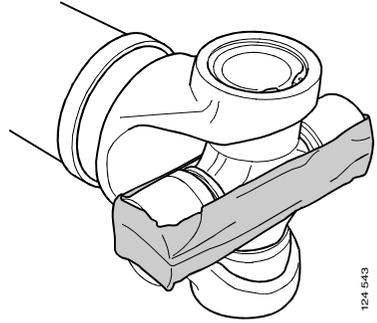
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Bearing cap bolts

- Secure the bearing cups with adhesive tape or the like.

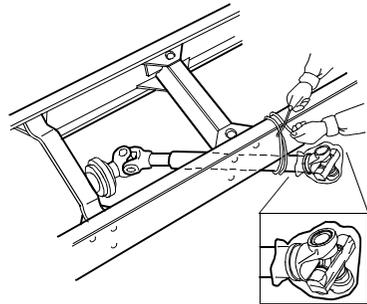
IMPORTANT!

If one of the bearing cups falls off a new universal joint spider and new bearing cups will have to be fitted. This is to avoid the risk of dirt getting into the joint.



124 543

- Attach the shaft to the chassis and cover the universal joint with a plastic bag.



124 566

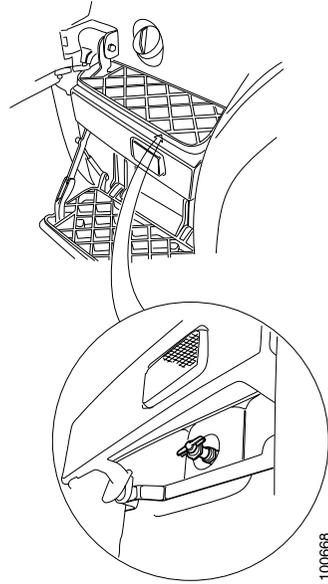
Air charging

Charging with air

If the engine cannot be started the brake system must be filled with air in some other way. Recovery vehicles usually have an air outlet that can be used to supply the towed or recovered vehicle with air.

Your vehicle has an air intake nipple located under the boarding step on the left-hand side. If the vehicle has a retractable boarding step, remove the reflector so that the air line can pass through the reflector hole and will not be clamped by the boarding step.

On T cab vehicles the nipple is located under the boarding step ahead of the front wheel.



Connection of air to the nipple on the left-hand side under the boarding step.

Emergency release of parking brake

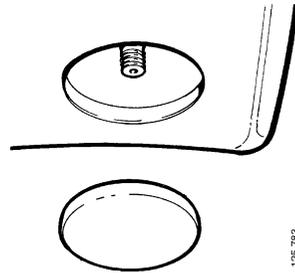
The parking brake can be released in an emergency by filling the parking brake circuit with air via the nipple located next to the interlock valve.



Chock the wheels to prevent the vehicle from moving when you fill the circuit with air.

- 1 Move the parking brake lever to the released parking brake position.
- 2 Use a hose to fill the parking brake circuit with air from a tyre or another vehicle.
- 3 Release the interlock valve.

The parking brake can be applied as usual, but only once.

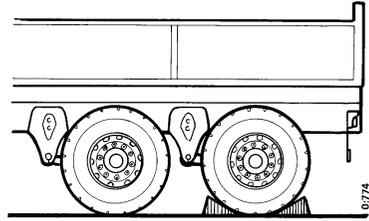


Filler nipple for the parking brake circuit, located in the cab.

Parking brake

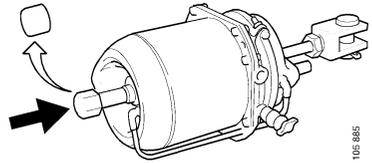
Releasing the parking brake without air pressure

1. Chock the wheels or connect a towbar to another vehicle to prevent the vehicle from moving.

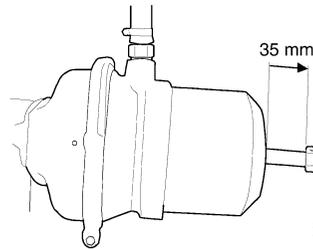


2. Undo the release bolts.

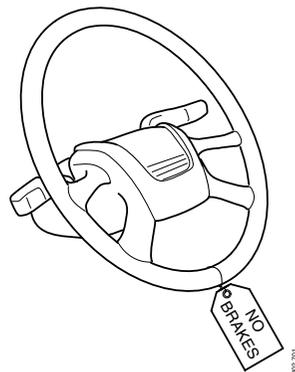
Note: On vehicles with disc brakes the release bolt should be unscrewed only 35 mm.



3. Place a warning note on the steering wheel.



When the parking brake is disabled and the compressed air system of the vehicle is empty, the vehicle will not have any brakes in working order.



Towing

Note: The vehicle should preferably be unloaded.

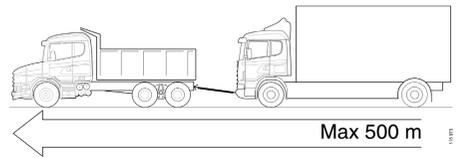
The vehicle must not be towed more than a maximum of 500 metres with the engine switched off and the propeller shaft still attached to the rear axle central gear. This is in order to avoid damage to the gearbox.

If possible, run the engine at idling speed to obtain power steering and air pressure in the brake system.

IMPORTANT!

Never tow with the clutch pedal depressed as this could damage the engine.

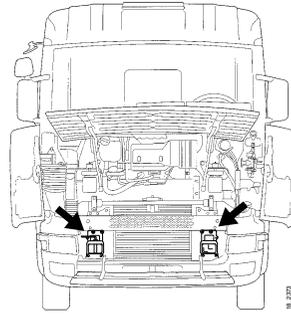
If the parking brake has been released with air to the brake system, it may be applied automatically if a pressure drop occurs in the brake system. For this reason, stop towing at regular intervals and charge the air system if it is not continuously supplied with air from the towing vehicle.



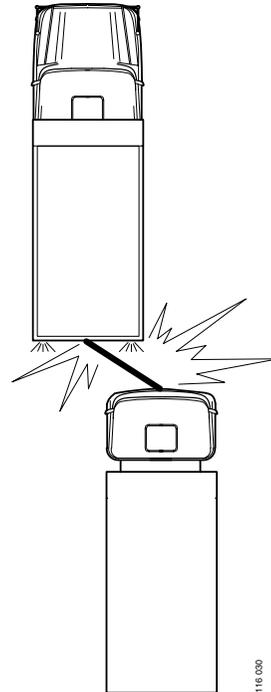
The cable must not be connected to the towing pin! The towing pin bracket is a casting and there is a risk of material failure which could result in injury.

Towing

For towing, the towing pin on the opposite side of the steering gear should be used together with the towbar.



If the parking brake is mechanically disconnected, the vehicle brakes will not work if a drop in system pressure occurs. The vehicle will be totally without brakes! A towbar should therefore be used so that it will be possible for the towing vehicle to brake the towed vehicle. Recovery is to be preferred, however. The demands made on the person steering the towed vehicle are high. The towbar could turn to either side, which could result in the vehicles colliding.

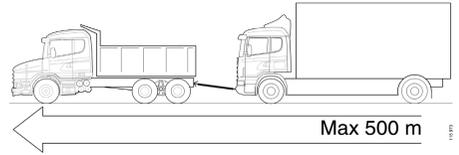


Tow-starting

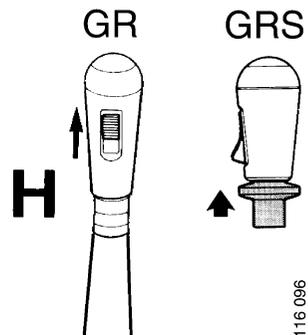
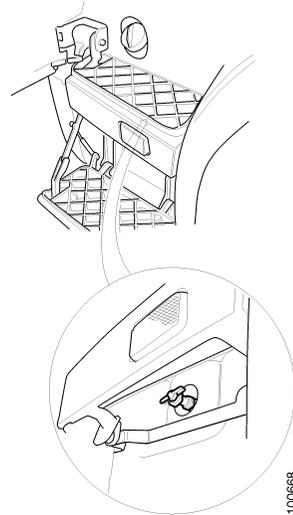
Manual gearbox

IMPORTANT!

Tow-starting should not be carried out for more than 500 metres. The gearbox could otherwise be damaged by insufficient lubrication.



1. Use a towbar.
2. Charge the vehicle with air, refer to the "Charging with air" section.
3. Select a high-range gear on the vehicle that is to be tow-started.
4. Release the parking brake.



Towing

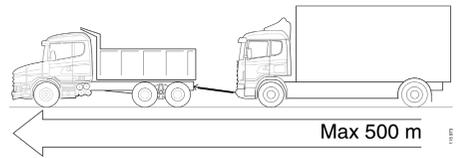
Automatic gearbox

IMPORTANT!

Vehicles with an automatic gearbox cannot be tow-started.

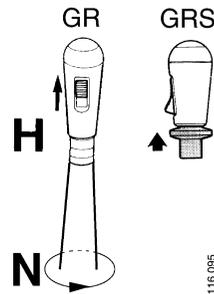
Low-speed manoeuvring

Low-speed manoeuvring with the engine switched off must not take place over a distance of more than 500 metres unless the propeller shaft is detached from the rear axle central gear. This is to avoid damage to the gearbox.



Manual gearbox

The shift selector should be in high range and neutral.



Automatic gearbox

The mode selector should be in the neutral position.

