

# VDZ Hefsystemen B.V.

## User manual VDZ-system



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## Introduction

The purpose of this manual is to familiarize the users with the operation of the VDZ system, which is essential for correct and proper use. The correct use of the VDZ system cannot be emphasized enough. All information should be READ and UNDERSTOOD before attempting to operate the VDZ system. **Your manual is your most important resource.** Keep it with the VDZ system, which is usually located in the recovery vehicle. **The safety of the VDZ system depends on the user.**

**Since the manufacturer or supplier has no direct control over the use of the VDZ system, it is the responsibility of the user to follow the safety rules and instructions.**

**All procedures described in this manual are based on operation of the VDZ system under proper operating conditions, without deviation from the original design. Changes to and/or modifications of VDZ Hefsystemen B.V. components are strictly forbidden without the prior written approval of VDZ Hefsystemen B.V.**

THE SYMBOL BELOW IS USED TO DRAW ATTENTION TO A POTENTIALLY DANGEROUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN SERIOUS DAMAGE OR EVEN INJURY.

	<p><b>IMPORTANT:</b></p> <p><b>This manual describes important procedures or instructions which are essential for safe and correct use and which, if not followed, may result in injury, malfunction or damage both to VDZ Hefsystemen B.V. components and to the vehicle to which VDZ Hefsystemen B.V. components are fitted.</b></p>
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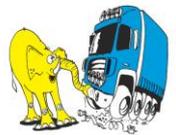
Due to continuous improvement of our products VDZ Hefsystemen B.V. reserves the right to make specific changes without prior notification. Please contact VDZ Hefsystemen B.V. for the latest documentation.

## READ AND FOLLOW

1. Keep the arm of your recovery system in a horizontal position at all times.
2. The arm of your recovery system must reach a minimum height of 1.20 m in a horizontal position.
3. Always visually check the towing eyes of trucks for cracks and fractures.
4. Always clean threaded towing eyes with a thread cutter and spray them with Teflon oil.
5. Screw in the screwed components until the end of the thread against the stop of the towing eye.
6. Components with a bayonet connection, secure the indication line in horizontal position with the locknut.
7. Mount the crossbar for both recovery and transport.
8. Do not fix the winch eyes with the locknut.
9. Use both components and a snatchblock for winching and lifting.
10. Lock sliding beams connected to VDZ Hefsystemen B.V. components with locking pins.
11. Avoid shocking loads as much as possible.
12. Do not exceed the value of the components as stated by the manufacturer.
13. Lifting a loaded truck, truck with crane behind the cabin, trucks with high empty weight is not permitted. The values of the VDZ Hefsystemen B.V. components will be exceeded.
14. Components of VDZ Hefsystemen B.V. are heavy and may have sharp edges. Therefore, always wear protective clothing such as gloves and steel-toed shoes.

**Note:** Remember that safe and proper use begins with common sense and caution.

**Failure to follow the instructions of VDZ Hefsystemen B.V. may result in damage or physical injury and constitutes a breach of the instructions.**



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## Congratulations

VDZ Hefsystemen B.V. congratulates you with the purchase of your new VDZ system and wishes you much success in using it in daily practice.

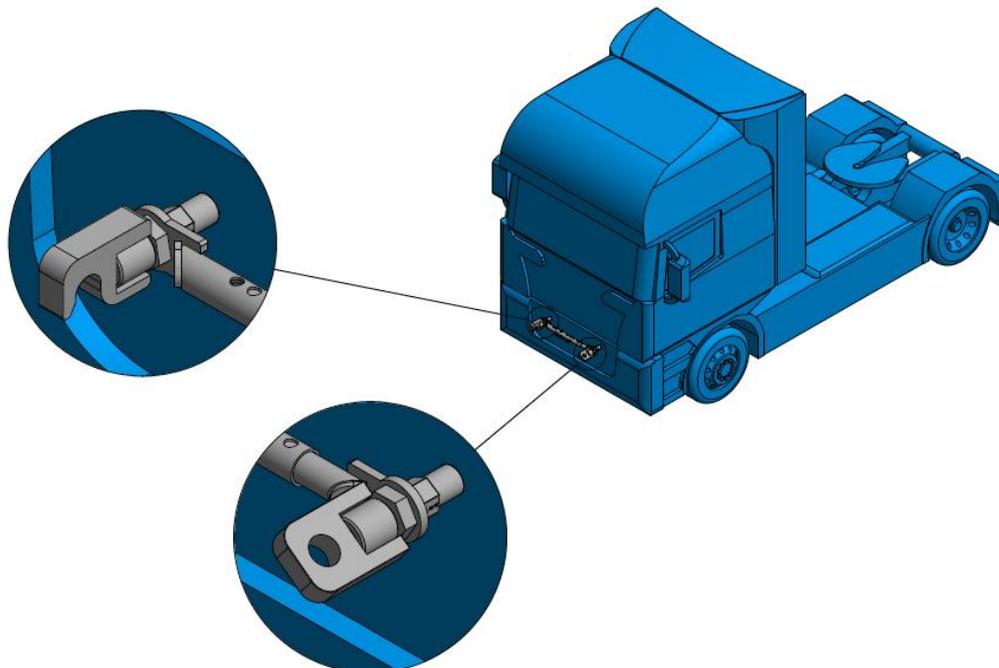
Your product has been carefully designed and tested, VDZ Hefsystemen B.V. continues to develop it continuously in order to be able to use the VDZ system also for the latest trucks.

## IMPORTANT: READ THE MANUAL

	<p>It is very important for the safe operation of your new VDZ system that you read this manual carefully and put the advice into practice!</p>
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## Introduction

Truck manufacturers today are increasingly ensuring that trucks have built-in pulling, towing and if necessary lifting points. They also specify the correct design of towing and pulling equipment and procedures to prevent damage to the truck. The VDZ system is designed to be used in the points provided by the manufacturer and allows towing and limited lifting of trucks, as long as the towing pins or adapters are correctly used and the prescribed values of VDZ Hefsystemen B.V. are not exceeded.



With the VDZ system much time is saved and working conditions are much safer than with the usual systems in the past.



## Applications

The VDZ system can be used in various ways, such as:

1. winching with cables
2. following behind the recovery truck
3. lifting and towing with a recovery vehicle
4. lifting with a crane
5. towing with a tow bar

Winching with cables



Following behind the recovery truck



Lifting and towing with a recovery vehicle



Towing with a tow bar



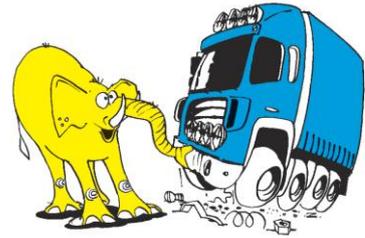
Lifting with a crane





## EG-Declaration

**VDZ Hefsystemen B.V.**  
**Morsestraat 28 4004 JP**  
**Tiel (NL)**



EG – Verklaring van overeenstemming Machinerichtlijn 2006/42/EG Bijlage II.1.A.  
EG – Declaration of conformity Machine Directive 2006/42/EG Annex II.1.A.  
EG – Konformitätserklärung Machinerichtlinie 2006/42/EG Anhang II.1.A

Hiermee verklaren wij dat de volgende producten:

We hereby declare that the following products:

Hiermit erklären wie, dass die Nachfolgens bezeichneten Produkte:

**VDZ A10 set Scania hooks**  
**VDZ P07 Set Mercedes/Renault/M.A.N.**  
**VDZ P06 Set Volvo FH, FM**  
**VDZ P13 Set Daf XF 105 <- 2013**  
**VDZ P10 Set Daf CF 85 <- 2013**  
**VDZ A11 Set threaded hook**  
**VDZ A50 Key 55 mm**  
**VDZ A08 Key 75 mm**  
**VDZ P25 Set Volvo FH -> 2013**  
**VDZ P24 Set Daf XF 106 -> 2013**  
**VDZ TRA 01 spreaderbar model 1**  
**VDZ A12 Set winch eyes universal**  
**VDZ P70 set Scania S-serie adapters**  
**VDZ TRAV SCAN-S spreaderbar model 2**

**and the Cross head lifting fitments for the following recovering systems:  
BRO/EMPL/FALKOM/BRECHTEL/OMARS/BRIMEC/BONIFACE/MILLER/VULCAN**

op basis van hun ontwerp en constructie en de als zodanig op de markt gebrachte resulterende uitvoering, voldoen aan alle toepasselijke bepalingen van de EG- Machinerichtlijn:

### **2006/42/EG(II.1. A)**

Deze EG-verklaring van overeenstemming vervalt zodra onderdelen buiten ons medeweten om worden gewijzigd.

Fabrikant en verantwoordelijke voor documentatie:

as a result of the manner in which the product was designed, the type of construction and the products which, as a result have been brought on to the general market, comply to the relevant basic health and safety regulations of the following EC Council Directive:

### **2006/42/EG(II.1. A)**

This EC-declaration of conformity shall become null and void when parts are subjected to any modification that has not met our approval.

Manufacturer and attorney of documents:

aufgrund ihrer Konzipierung und Bauart, sowie der von uns in Verkehr gebrachten Ausführung, den einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen der nachfolgende EG-Richtlinie:

### **2006/42/EG(II.1. A)**

Bei einer nicht mit uns abgestimmten Änderung der Maschine verliert diese EG-Konformitätserklärung ihre Gültigkeit.

Hersteller und Dokumentationsbevollmächtigter:

**VDZ Hefsystemen B.V.**  
**Morsestraat 28**  
**4004 JP Tiel**  
**Nederland**

Tiel, 31-07-2014

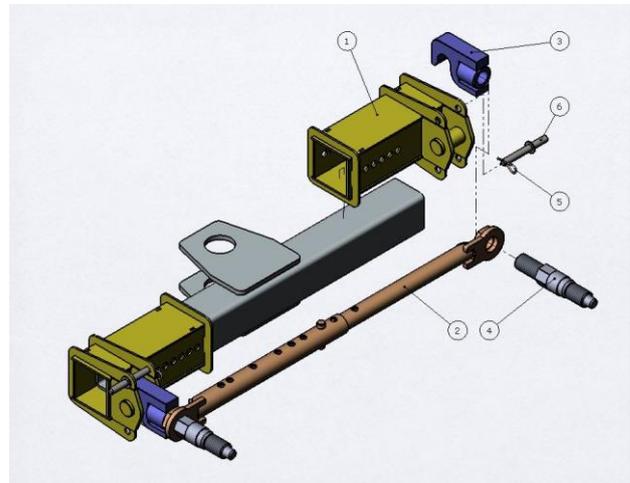
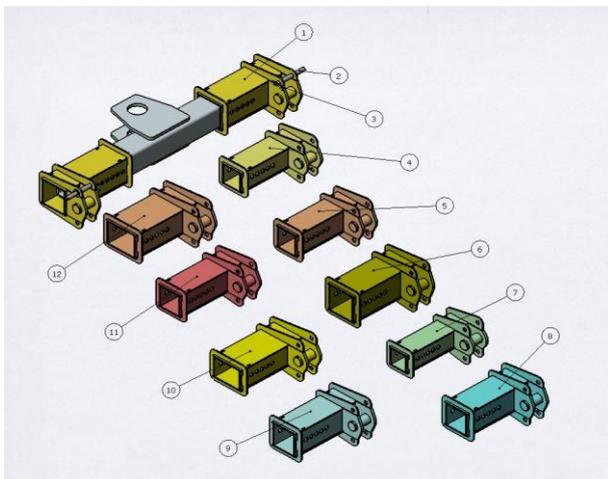


## Structure of the VDZ system

In its most complete form, the VDZ system contains 24 parts (basic set), making it suitable for almost all modern trucks. At VDZ Hefsystemen B.V. there is more. You can expand your set with additional VDZ Hefsystemen B.V. components to optimize your recovery work even more.



Almost all trucks above 7.5 tons have two towing eyes in the chassis at the front and the VDZ system can be fitted to these for winching, towing and limited lifting. There are also brands of trucks that have only one towing eye and lifting is impossible with these. For trucks with a single towing eye, it is possible to fit a towing pin to the single towing eye in the chassis, making winching and towing with a towing bar possible. For most modern recovery vehicle systems such as: Bro, Vulcan, Miller, Empl, Omars, Brechtel, Falkom, Boniface and others, slide bars for the T-beam are available to connect the VDZ system.



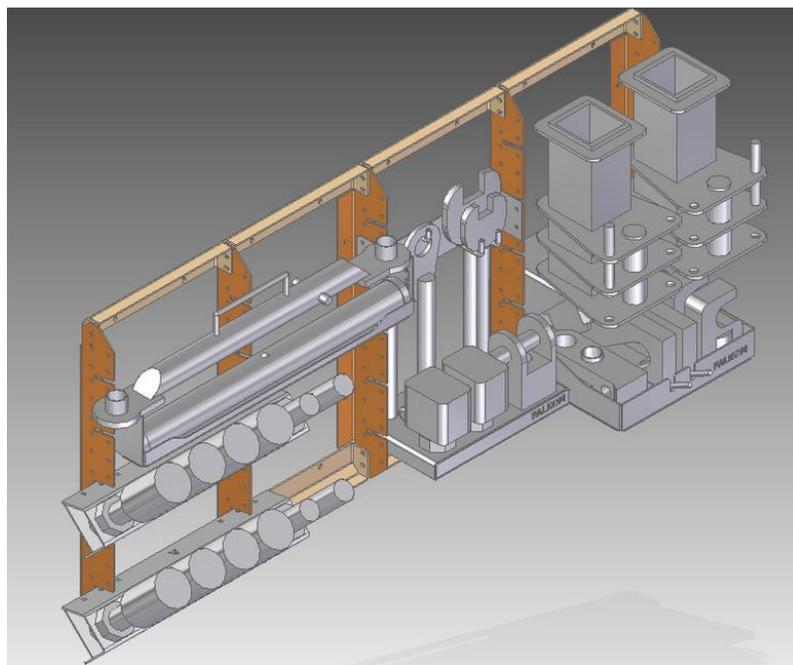


## Spreader bar

The VDZ system also includes adjustable traverses for mounting between the two towing points to provide maximum strength during the recovery operation.

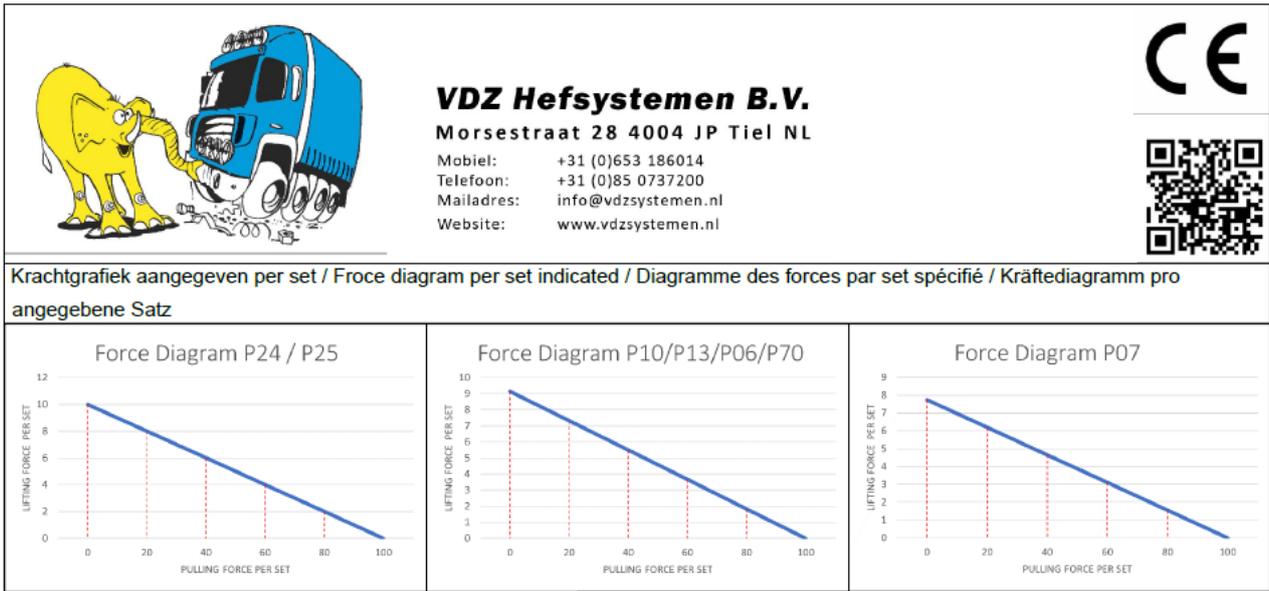


For clear and safe storage of all components of the VDZ system, a practical storage system is available that can be installed in the recovery vehicle. See the last chapter of this manual for more details.





## CE type plate with force graph of a VDZ system



## General notes on pulling, towing and lift points

**Important:** It is important that the towing and lifting points of the stranded truck are in good condition before the VDZ system is installed. Make sure, for example, that no cracks are visible and/or that no parts have broken out.



It is very important that the arm of the recovery system is in a horizontal position; the horizontal position must be able to reach a height of 1.20 meters in order to work properly with the VDZ system.



	<p><b>IMPORTANT:</b></p> <p><b>Before use: check pulling, towing and lifting points for good condition.</b></p>
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	<p><b>IMPORTANT:</b></p> <p><b>The arm of the recovery vehicle must always be in a horizontal position!</b></p>
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	<p><b>IMPORTANT:</b></p> <p><b>Use only original parts from VDZ Hefsystemen B.V.!</b></p>
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## Towing pins and adapters

All towing pins or towing adapters have a universal thread on one side for mounting several components from the set on the towing pins or towing adapters. This simplifies the procedure in a recovery operation. There is also more safety and speed to be gained by not having to work with different tow pins or pull adapters each time.

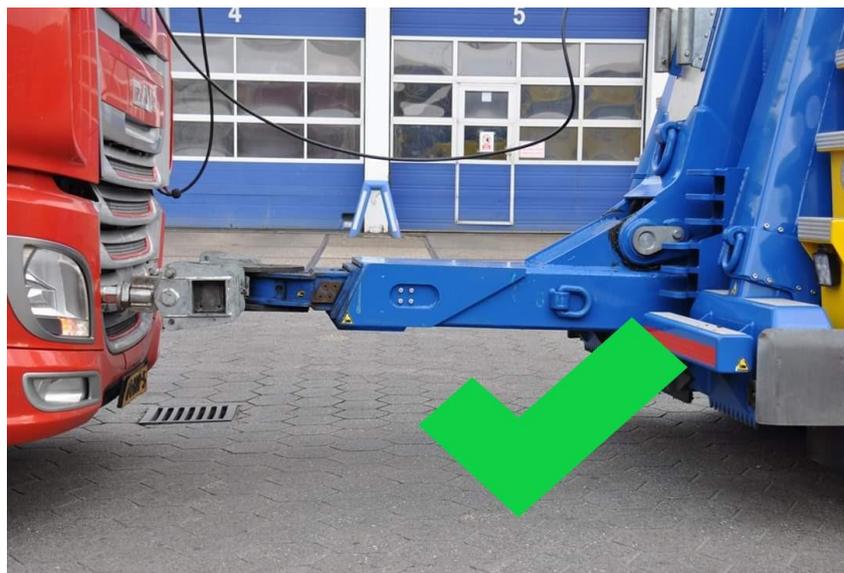
The towing pins or towing adapters are available in various designs, and this has to do with the type or brand of the truck. There is always one side of the tow pin or tow adapter that is specially designed for the type or brand of the vehicle. The towing pins are supplied with a bayonet or threaded connection, while the towing adapters are supplied with a locking pin connection or a bolt connection.

On all towing pins or towing adapters it is indicated for which brand or type of vehicle they are suitable. All towing pins and towing adapters have a prescribed value with regard to pulling and lifting. This is different for each brand and type.

The possibilities to screw the universal components of VDZ Hefsystemen B.V. onto the universal thread of the pulling pin or pulling adapter are described in detail in this manual.

## Important information regarding the use of the VDZ system

The arm of the recovery system must always be in a horizontal position.





Mount the crossbar at all times, both for recovery and transport.







## Information about residual risks

- If the arm of the recovery system is not in a horizontal position during towing, incorrect forces will be transferred via the T-bar to the towing components installed in the vehicle to be towed. The components are thereby overloaded and the prescribed value is exceeded. Exceeding the prescribed value can lead to damage with serious consequences.
- Not doing a visual check on the towing eyes of the vehicle to be towed can have extreme consequences.
- Not cleaning the threads in the towing eyes of the vehicle to be towed can result in damage to the threads of the components or the threads in the towing eyes of the truck.
- Failure to clean the threads in the towing eye of the vehicle to be towed may result in the towing pin only being fitted halfway into the towing eye, drastically reducing the capacity of the towing pin or even pulling the towing pin out of the towing eye, causing damage or injury.
- Do not fully tighten threaded pulling pins until the end of the thread against the stop of the pulling pins. This will lead to a reduction in capacity of the towing pin. The thread of the towing pin cannot absorb the specified force and damage or injury may result.
- Bayonet locking pins have an indication line, if the indication line is not mounted horizontally, this will result in serious overload, damage or injury.
- Failure to tighten the locking nuts on the towing pin with bayonet connection can result in loss of capacity, leading to damage or injury.
- Failure to secure the locking pins on Scania adapters (VDZ A10) during towing may result in loss of the locking pins with subsequent consequences.
- Towing adapters of Scania Next Gen series are secured with M20 10.9 bolts and have a prescribed torque of 200nm. Failure to tighten the M20 bolts with a torque tool will result in loss of capacity of the tow adapters, causing damage or injury.
- Failure to fit a spreader bar will result in unnecessary deformation of the chassis of the vehicle to be recovered. In addition, not mounting the spreader bar will cause overloading of the VDZ system's attached components.
- Securing the winch eyes (VDZ A12) can lead to damage to the components. Therefore, always turn the winch eyes completely on the threads of the components and then back one complete turn so that they can turn with the winch cable.
- Lifting on one single towing pin or towing adapter is not permitted. This may lead to serious overloading or permanent deformation.
- Lifting of a heavily loaded vehicle or vehicles with a heavy crane or superstructure behind the cabin is not permitted. This may lead to overloading or permanent deformation, both on the VDZ system components and on the chassis of the vehicle to be lifted.
- Not using a snatch block during lifting or winching operations can lead to overloading the VDZ components.
- Using a two-pin chain or sling which is too short during lifting or winching operations may lead to an overload of the VDZ components.
- Failure to fit the securing pins in and on the slide bars on the T-bar may result in losing the defective vehicle during towing.
- Turning away briefly with the recovery truck while towing a defective vehicle can result in the sliders jamming against the arm of the recovery system, putting incorrect forces on the VDZ components and potentially overloading them. It also causes damage to the arm of your recovery installation.
- While manoeuvring, pushing the sliders against the arm of the recovery system will overload the components and may have serious consequences.
- Do not put more than 3000 kg of weight on the arm of the recovery installation when having a heavily defective vehicle follow behind. This will overload the VDZ components and reduce driving comfort during the towing process.
- Locking the steering wheel while letting a defective vehicle follow the recovery truck will lead to overloading the VDZ components and severe wear on the steering axle tyres.
- Failure to regularly check the VDZ components by visual inspection can lead to the use of overloaded or damaged components in a subsequent recovery operation, with all its consequences.
- Failure to use protective clothing can lead to serious injury or unpleasant consequences.
- The use of grease on the components is not permitted. This attracts dirt and limits visual inspection.
- Not placing wheelstands under the vehicle to be salvaged during coupling or work can have serious consequences for the employee who is under the defective vehicle at that time.
- The use of self-built components not designed by VDZ Hefsystemen B.V. shall not be allowed on VDZ Hefsystemen B.V.'s original components.
- VDZ Hefsystemen B.V.'s responsibility shall cease if an annual inspection of the components has not been carried out.

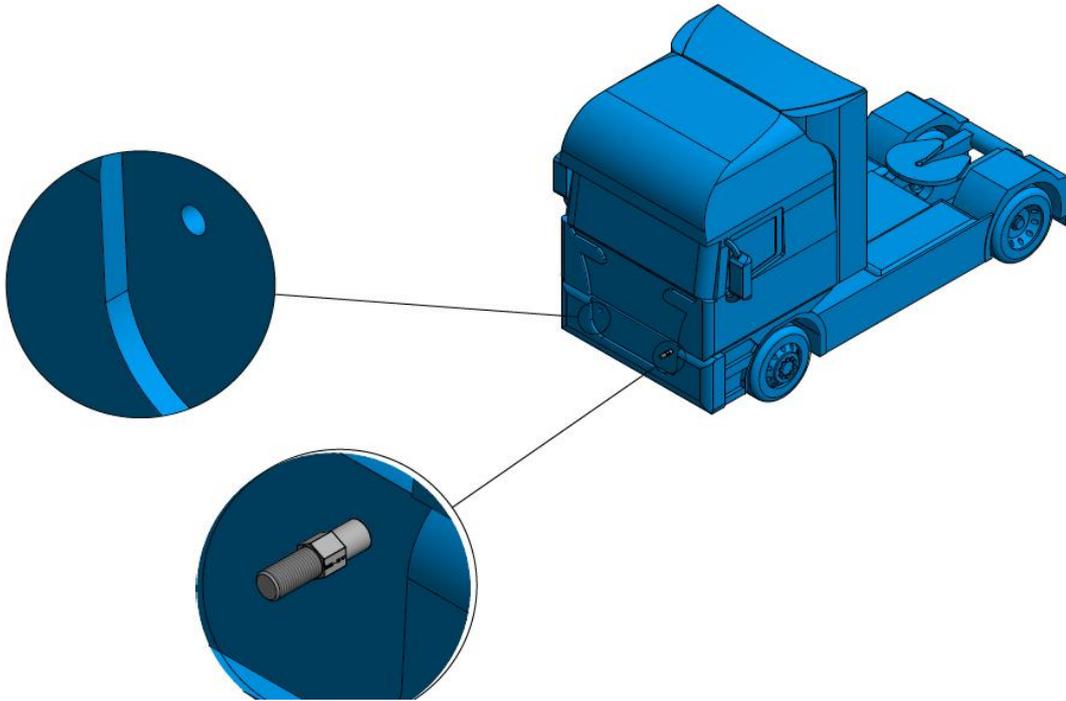
	<p><b>IMPORTANT:</b></p> <p><b>As VDZ Hefsystemen B.V. has no direct supervision of the on-site inspection, these instructions and safety aspects are the responsibility of the user.</b></p>
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## Instructions for mounting screwed towing pins, as applied to: Mercedes, Renault, M.A.N., DAF 106 and Volvo models after 2013.

The standard tow points of trucks of the above-mentioned brands have internal threads. The VDZ system therefore contains tow pins that can be screwed in.

VDZ Hefsystemen B.V. therefore recommends the use of a thread cutter (so-called tap) to cut the thread clean. The clean cutting of the screw thread is of great importance, because the towing pins must be screwed into the towing lugs up to the end of the thread and it also helps to preserve the material and increases the lifetime of the towing pins.

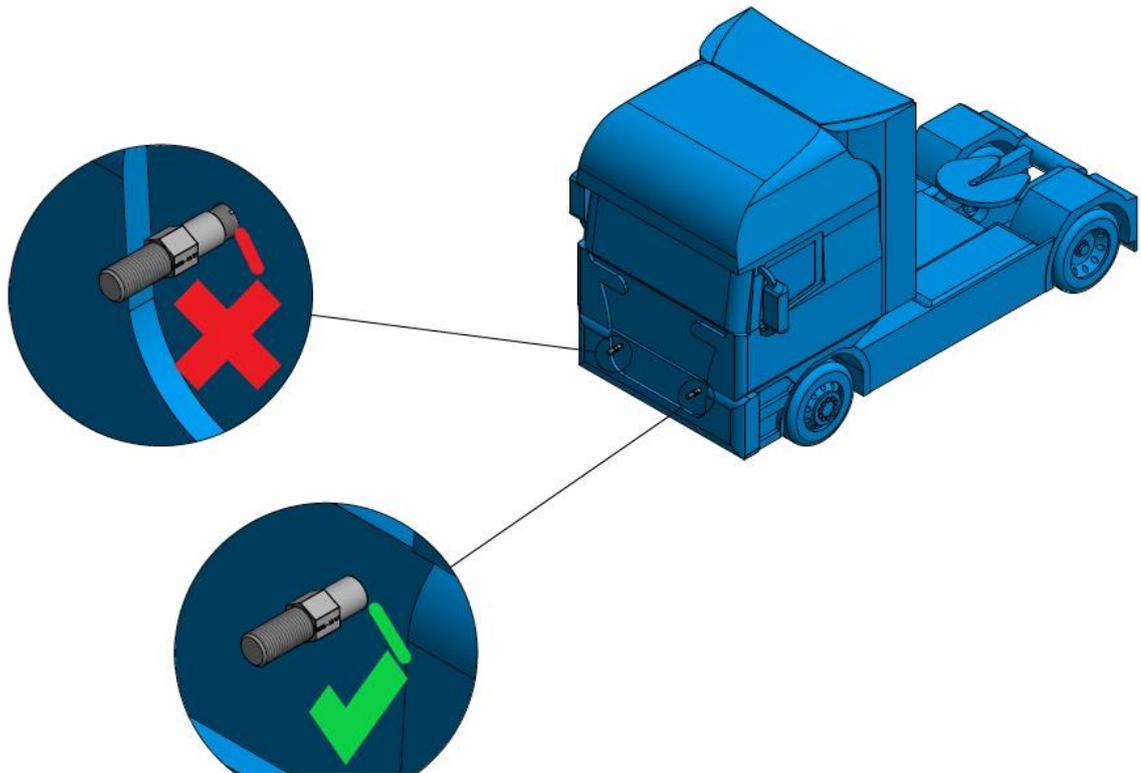


	<p style="text-align: center;"><b>IMPORTANT:</b></p> <p style="text-align: center;"><b>Use a few drops of Teflon oil and cut the thread clean with the tap!</b></p>
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	<p style="text-align: center;"><b>DANGER:</b></p> <p style="text-align: center;"><b>Components from VDZ Hefsystemen B.V. may have sharp edges, for example at the screw thread. These edges may cause injuries. Therefore, always use gloves!</b></p>
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It is important that the towing and lifting forces are properly transferred to the truck chassis. Therefore, it is necessary to screw the towing pin completely into the threaded hole up to the stop and then tighten it firmly with the enclosed open-end spanner.



**IMPORTANT:**

**The towing pin must always be fully inserted into the towing eye against the stop!**



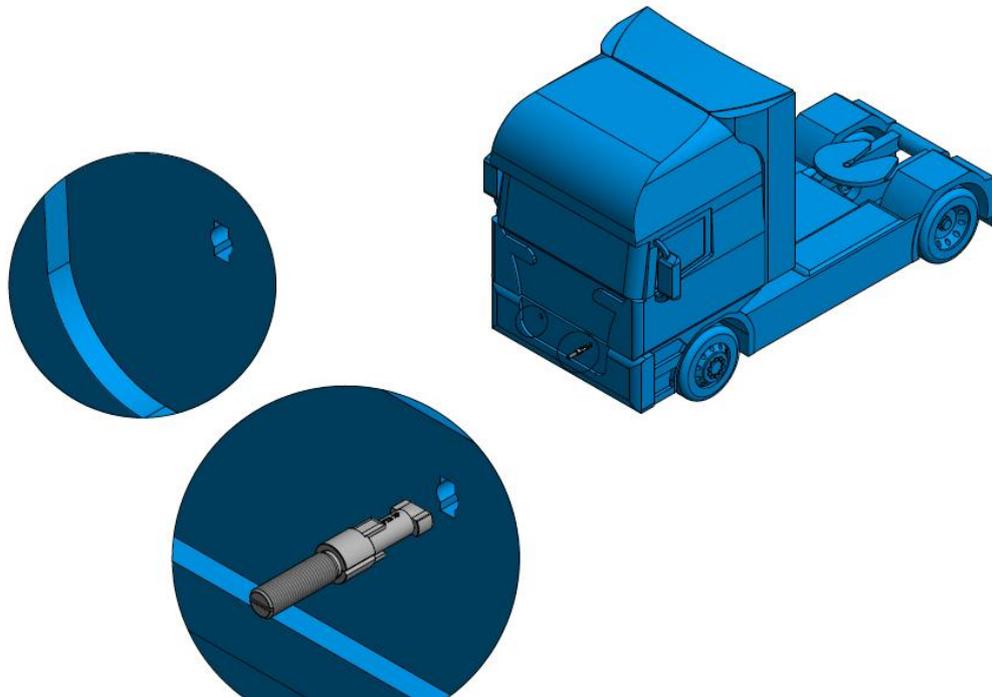
**IMPORTANT:**

**Tighten the towing pins securely using the spanner supplied!**

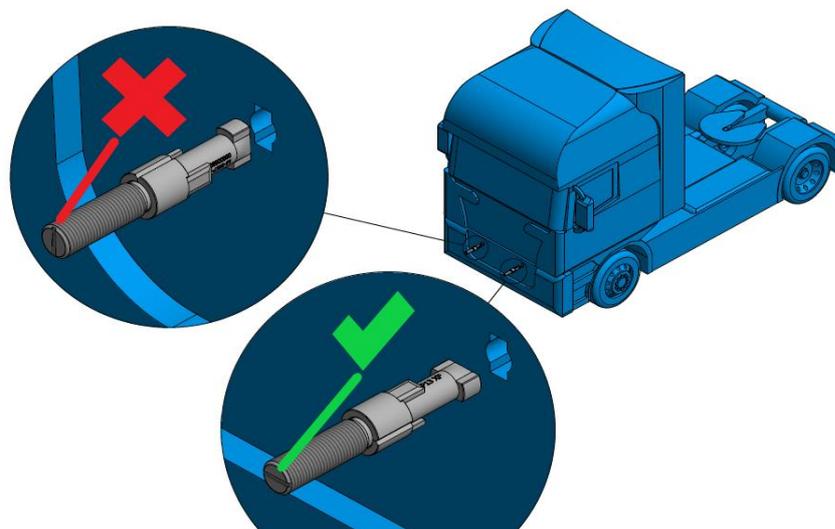


## Instructions for mounting bayonet towing pins as used on: Volvo FH / FM, DAF CF 85 and DAF XF 105 models before 2013

The standard tow points of trucks of the above-mentioned brands are designed with a keyhole shape.



The VDZ system therefore contains towing pins with a cam, which are inserted by inserting them in the towing eye and then turning them a quarter turn. By turning the towing pin a quarter turn, it falls into a notch at the back of the towing eye, blocking the pin. The position of the cam is very important, which is why the towing pins are provided with an indication line.



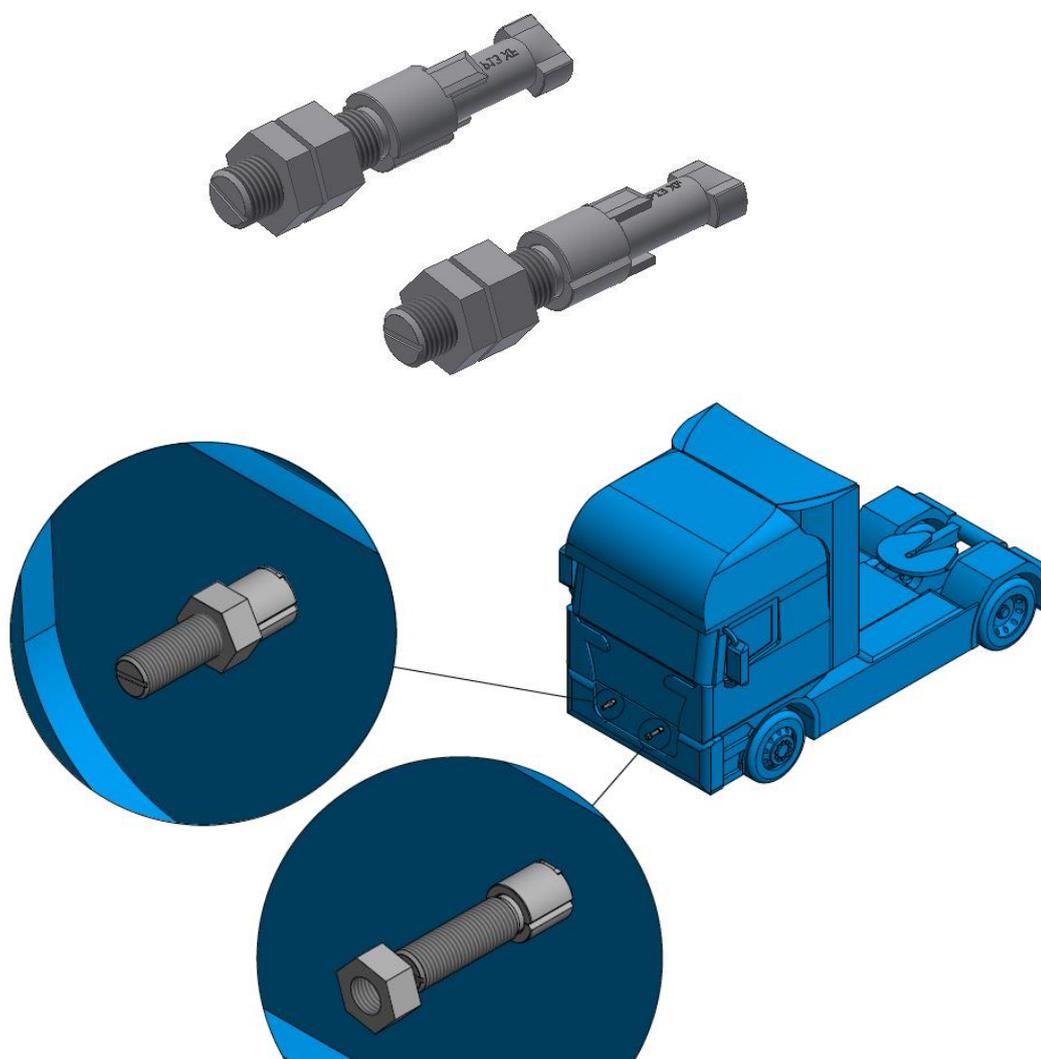


	<p style="text-align: center;"><b>IMPORTANT:</b></p> <p style="text-align: center;"><b>The correct position of the towing pins is always with the indication line horizontal!</b></p>
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These towing pins have a sliding cam ring that fits exactly into the keyhole shape of the standard towing point on the truck. By using a thick hexagonal nut and a lock ring, these towing pins can be securely fastened with the spanner supplied.

**Illustration:**

As an example, a set of towing pins with cam and sliding cam ring.  
(DAF XF 105) VDZ P13

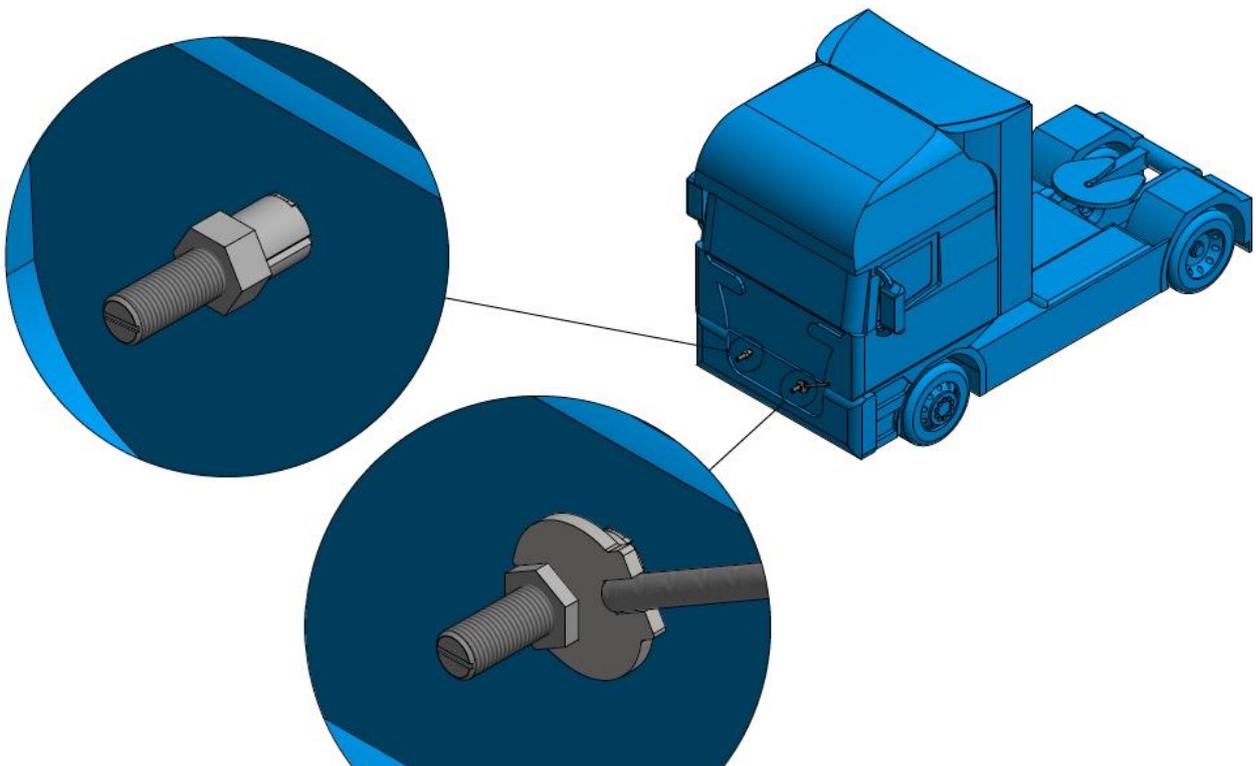




	<p><b>IMPORTANT:</b></p> <p><b>Volvo FH / FM models before the year 2013 have a keyhole shape that is almost identical. However, there is a special sliding cam ring on the towing pin. The sliding cam ring has an upper and a bottom side. This way the sliding cam ring fits on several types of Volvo models. More about this in the chapter Volvo VDZ P06.</b></p>
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It is important that the towing and lifting forces are properly transferred to the truck chassis. Therefore it is necessary to place the sliding cam ring correctly in the towing eye and then secure it with the thick hexagon nut.

	<p><b>IMPORTANT:</b></p> <p><b>Tighten the towing pins securely using the spanner provided!</b></p>
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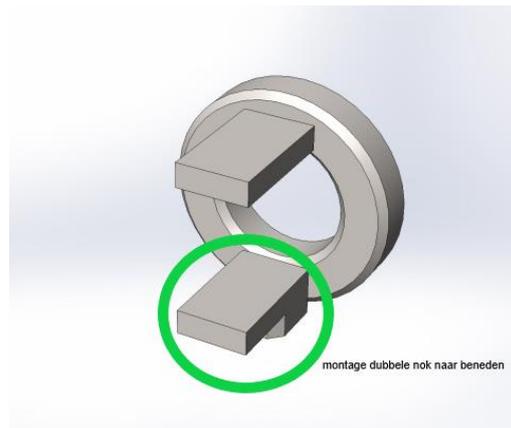
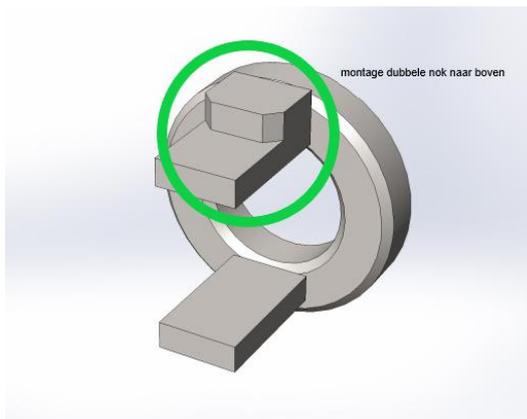
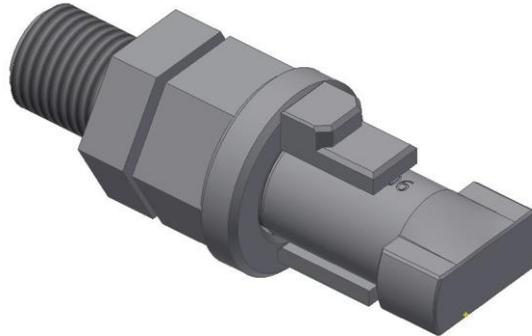


## Volvo VDZ P06

Volvo trucks type FH and FM built before 2002 have the same keyhole shape towing point as Volvo trucks built from 2002 up to and including 2013. The tow pins are the same and are fitted with a special sliding cam ring; the cam ring has a bottom and top. One of the lips on the cam ring has a thickening and if this is mounted upwards, it gives more strength to the chassis for pulling, towing and lifting. On some types, the plastic sheeting at the front of the truck is in the way and it is not possible to mount the cam ring with the thickened lip upwards. Then turn the cam ring with the thickened lip downwards. Then firmly secure the towing pin with the thick hexagonal nut and spanner provided.

### Illustration:

Volvo towing pin VDZ P06 with special sliding cam ring.



	<p><b>IMPORTANT:</b></p> <p><b>If possible always mount the special sliding cam ring with the thickening on the lip upwards.</b></p>
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	<p><b>IMPORTANT:</b></p> <p><b>Tighten the towing pins securely using the spanner supplied!</b></p>
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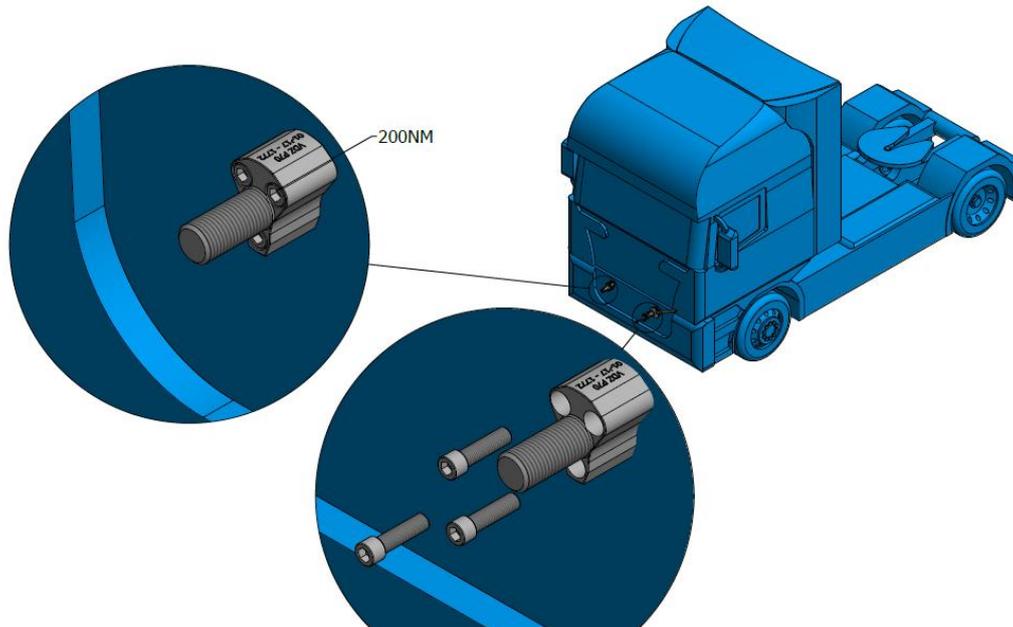


## Scania adapters

For Scania before the year 2016 VDZ Hefsystemen B.V. has adapters in the form of a hook with a locking pin, a mounting with pin connection. The Scania hooks set consists of a left and right version, recognizable on which side the locking clip is mounted. Mounting the Scania hooks is the simplest version of the VDZ system. Insert the hook with the safety clip pointing towards the radiator into the towing eye, then fit the locking pin and insert into the safety clip.



For a Scania from model year 2016 Scania Next Gen, tow adapters have been developed which are mounted in the designated screw holes on the chassis using three M20 10.9 bolts. VDZ Hefsystemen B.V. recommends cutting the screw thread in the chassis clean with a thread cutter (tap) and subsequently mounting the towing adapter with the M20 bolts provided. The M20 10.9 bolts must always be tightened with a torque spanner to the prescribed 200NM. Make sure that the fitting surface on the chassis where the adapter is to be fitted is flat and clean.



### IMPORTANT:

**Tighten the M20 bolts to the correct torque with a torque spanner!**

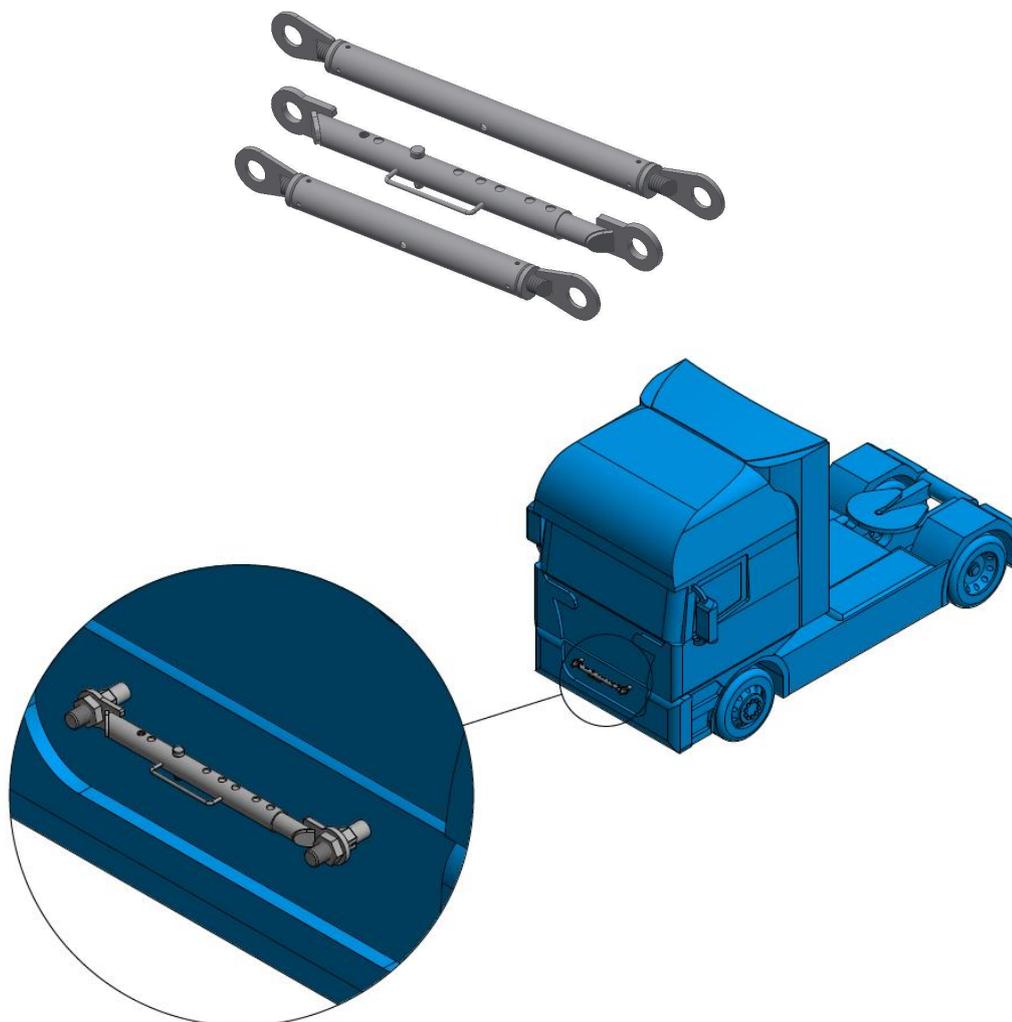
**NEVER USE AN AIR SPANNER!**



## Installation of the spreader bar

After the tow pins or adapters have been fitted correctly, the spreader bar must be fitted. With the exception of Scania from year 2016, it is not possible to fit a spreader bar. The crossmember is an adjustable coupling bar with which the two tow pins or adapters are stably coupled to each other so that the pulling, towing and lifting forces are correctly distributed and damage is prevented.

The spreader bar has various designs, depending on the width of the chassis. The crossmember is executed with a pin connection or a threaded connection.

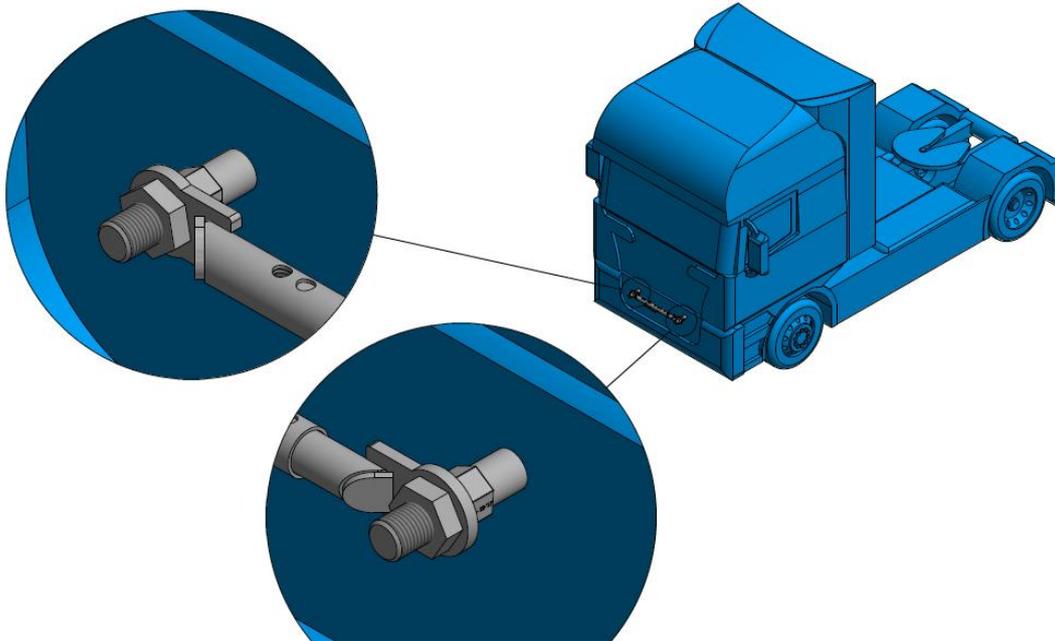


### IMPORTANT:

**Always mount the cross bar to avoid damage to the vehicle to be recovered!**



Mount the spreader bar directly on the tow pins or adapters and secure it firmly with the thin hexagon nuts and spanner provided.



	<p><b>IMPORTANT:</b></p> <p><b>Tighten the crossbar securely using the spanner supplied!</b></p>
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After carrying out the above described actions, the assembled system is ready for mounting the towing hooks, winch eyes or tow coupling.

	<p><b>IMPORTANT:</b></p> <p><b>Components not designed by VDZ Hefsystemen B.V. may not be fitted to the VDZ system!</b></p>
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	<p><b>IMPORTANT:</b></p> <p><b>As VDZ Hefsystemen B.V. has no direct supervision over the use of the VDZ system, the user, operating personnel is responsible for complying with the said instructions.</b></p>
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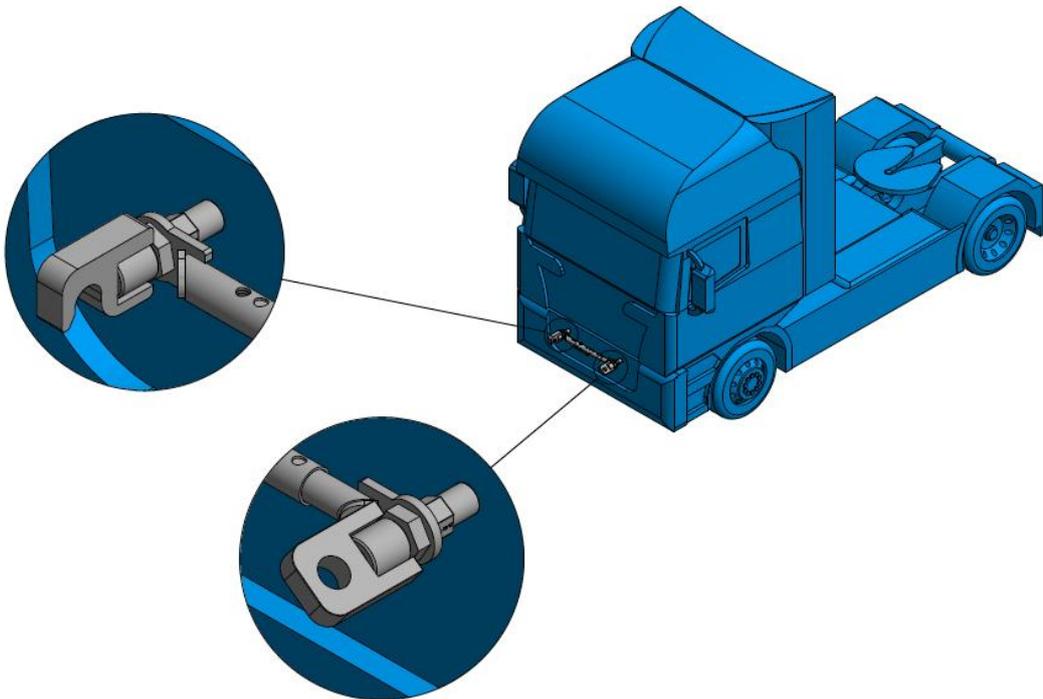
## Additional information spreader bar

VDZ Hefsystemen B.V. prescribes that no cross bars should be used on Scania vehicles built before 2016, whether for winching, pulling or towing. The three different types of crossbars from VDZ Hefsystemen B.V. as described earlier do not fit the components intended for this type of Scania either. When mounting the towing components, there will always be side play on the towing eyes, which means that fitting a crossbar correctly can cause serious damage instead of providing reinforcement.

	<p style="text-align: center;"><b>IMPORTANT:</b></p> <p style="text-align: center;"><b>Do not fit a self-designed spreader bar on Scania vehicles built before 2016, VDZ Hefsystemen does not supply a spreader bar for this type of vehicle.</b></p>
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## Attachment of universal towing hooks, winch eyes and towing jaw

For the lifted towing of a defective vehicle behind the recovery vehicle, use the VDZ A11 universal towing hooks. For towing or lifting a vehicle during a recovery operation, use universal towing eyes VDZ A12 or universal swivel winch eyes VDZ DRK01. For towing with a towing bar, use universal towing coupling VDZ AK01.



The universal towing hooks, winch eyes and tow coupling are designed so that they can be fitted to all tow components of the VDZ system.



**VDZ A11 universal hook eyes**



Screw the hook eyes onto the thread of the towing components as far as possible and set the hook eyes in the correct position, so that they can be connected to the lifting brackets on the recovery installation.

**VDZ A12 universal winch eyes**



Screw the winch eyes as far as possible onto the thread of the towing components. As soon as the winch eyes have jammed against the locknut, turn the winch eyes back a full turn on the thread. This makes it possible for the winch eyes to turn with the winch cable or sling that can be attached to the winch eyes. **ABSOLUTELY DO NOT TIGHTEN THESE WINCH EYES!**



**IMPORTANT:**

**Do not tighten the universal winch eyes VDZ A12!**

**VDZ DRK01 universal swivel winch eyes**



Screw the swivel winch eye as far as it will go on the thread of the towing components, but in contrast to winch eye VDZ A12, tighten it with the enclosed open-end spanner. This type of winch eye can rotate on the housing of the winch eye itself which is mounted on the thread.

**VDZ AK01 universal towing jaw**



Screw the pulling coupling as far as possible onto the thread of the pulling components. Secure the pulling coupling by turning the thin hexagonal nut on the pulling components against the pulling coupling and tighten it with the spanner provided.



**IMPORTANT:**

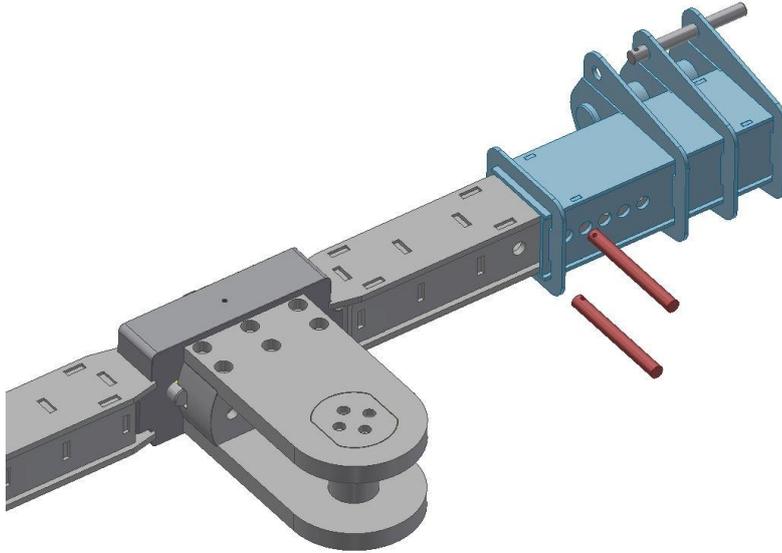
**The universal swivel winch eyes VDZ DRK01 and the towing jaw VDZ AK01 must be properly secured!**



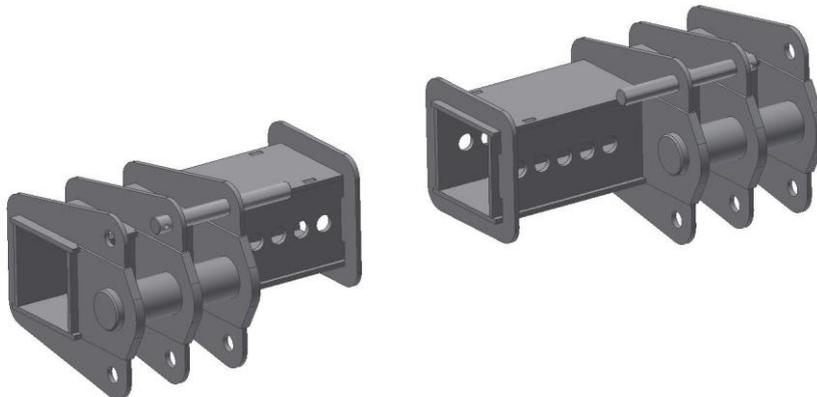
## Lifting brackets in various types and sizes

Lifting brackets are tubes that are slid over the T-beam. The T-bar is mounted on the arm of the recovery installation. The salvage systems have different dimensions for the T-bar for each brand or type. VDZ Hefsystemen B.V. makes it possible to produce and deliver the correct dimensions for your salvage system under its own management. The lifting brackets sleeves are open on both sides so that they can be fitted to the T-bar either left or right. There are staples on the lifting brackets tubes that can be connected to the universal towing hooks. The staples contain a locking pin that is used to block the tow hooks when towing a vehicle.

The lifting brackets are also provided with a number of holes on the sides of the sleeves. Locking pins can be fitted in these holes. The function of these pins is to secure the lifting brackets to the T-bar, so that during the towing of a vehicle the lifting brackets stay in place and do not shift on the T-bar. (Locking pins for the T-bar are not standardly supplied by VDZ Hefsystemen B.V.)



Trucks have different dimensions of the chassis or towing points per brand or type. Because the lifting brackets can be mounted both left and right on the T-beam, any size of chassis or towing points can be achieved.





In the beginning of this manual we mentioned that the arm of the recovery installation must be able to reach a height of 1.20 m in a horizontal position. It may be that salvage systems cannot achieve this. VDZ Hefsystemen B.V. has a solution for this and makes lifted brackets with raised connections. This makes it possible for the arm of the salvage installation to remain horizontal and still reach the 1.20 meters. The principle and the working method is the same as with the standard lifted brackets. However, there is a maximum of 30 cm extra for safety reasons.



**Remark:** When using raised lifted brackets, there is one remark: when coupling a Scania truck, the lower grill must be opened to reach the towing points. The grill then extends in front of the vehicle, leaving limited space between the towing points brackets do not. Therefore, when using raised brackets and hitching up a Scania truck, the lower grill must always be removed.



**IMPORTANT:**

**Always fit the locking pins in the lifting brackets!  
Never drive without the locking pins in place!**



## Specifications of the tow components

The tow components are each provided with an identical part and serial number, a QR code and for which brand or type of truck the tow components are intended. The components of VDZ Hefsystemen B.V. are extensively tested by acknowledged specialized companies and therefore each pulling component has its own prescribed value for pulling and limited lifting.

If you exceed the value prescribed by VDZ Hefsystemen B.V., the pulling component is overloaded. By overloading the pulling components, they no longer meet the specified capacity. As a result, permanent deformation may occur and damage may be caused to the towing components or the vehicle to be recovered during or after the work.

### VDZ A10 Scania hooks



These adapters are not suitable for winching due to the open hook construction. The capacity for towing or pulling is 50 tons and has a maximum lifting force of 5 tons per adapter. These values only apply to the adapter and not to the vehicle to which the adapters are fitted.

### VDZ P07 Mercedes, Renault AE, and M.A.N.



The capacity for towing or winching is 50 tons and has a maximum lift force of 3.87 tons per towing pin. These values only apply to the pulling pin and not to the vehicle to which the pulling pin is attached.

### VDZ P06 Volvo FH / FM from the year 2002 to the year 2013



The capacity for towing or winching is 50 tons and has a maximum lifting force of 4.57 tons per pulling pin. These values only apply to the pulling pin and not to the vehicle to which the pulling pin is attached.

### VDZ P13 DAF XF / 105 up to and including year of construction 2013



The capacity for towing or winching is 50 tons and has a maximum lifting force of 4.57 tons per pulling pin. These values only apply to the pulling pin and not to the vehicle to which the pulling pin is attached.

### VDZ P10 DAF CF85 up to and including year of construction 2013



The capacity for towing or winching is 50 tons and has a maximum lifting force of 4.57 tons per pulling pin. These values only apply to the pulling pin and not to the vehicle to which the pulling pin is attached.



**VDZ A11 Universal hook eyes**



The universal hook eyes are not suitable for winching, due to the open hook construction. The capacity of this component for towing is 50 tons and has a maximum lifting force of 5 tons per component.

**VDZ P25 Volvo FH / FM and Renault from construction year 2013**



The capacity for towing or winching is 50 tons and has a maximum lifting force of 5 tons per pulling pin. These values only apply to the pulling pin and not to the vehicle to which the pulling pin is attached.

**VDZ P24 DAF 106 XF/CF from construction year 2013**



The capacity for towing or winching is 50 tons and has a maximum lifting force of 5 tons per pulling pin. These values only apply to the pulling pin and not to the vehicles to which the pulling pins are attached.

**VDZ A12 Universal winch eyes**



The capacity for towing or winching is 50 tons and has a maximum lifting force of 5 tons per component. These components must absolutely not be fixed with the locking nuts. These components must always be able to rotate with the winch cable or chain.

**VDZ P70 Scania adapters from year of manufacture 2016**



The capacity for pulling or winching is 50 tons and has a maximum lift force of 5 tons per adapter. These values only apply to the pulling pin and not to the vehicles to which the adapters are fitted.

**VDZ DRK 01 Universal swivel winching adaptors**



The capacity for towing or winching is 10 tons and has a maximum lifting force of 5 tons per component. These components must be tightened with the supplied open-end spanner.

**VDZ SCA2627 Scania winching eyes**



The capacity for towing or winching is 50 tons and has a maximum lift force of 5 tons per component.

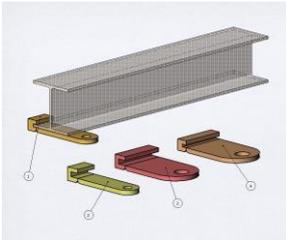


**VDZ AK01 Universal towing jaw**



The capacity for towing with the aid of a spreader bar is 50 tons. It is not permitted to lift with this component.

**VDZ winch plates**



- VDZ WP10/1 A06**  
Winch plate 10 cm wide with 1 cm groove for the chassis has a capacity of 6 tons pulling force.
- VDZ WP10/2 A07**  
Winch plate 10 cm wide with 2 cm groove for the chassis has a capacity of 13 tons pulling force.
- VDZ WP20/1 A05**  
Winch plate 20 cm wide with 1 cm groove for the chassis has a capacity of 20 tons pulling force.
- VDZ WP20/2 A02**  
Winch plate 20 cm wide with 2 cm groove for the chassis has a capacity of 20 tons pulling force.

**The winch plates are not suitable for lifting!**

**Using the VDZ system in various ways**

**Winching with cables**

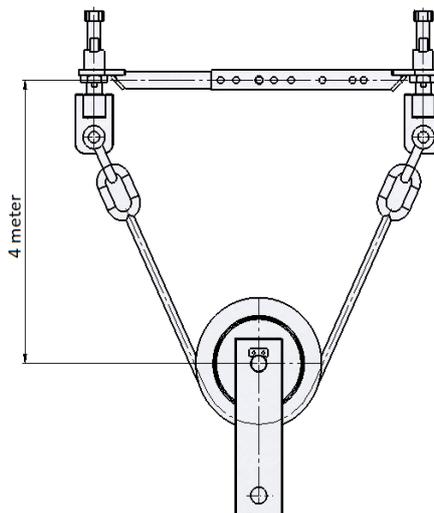
To winch a stranded truck with cables, you use the traverse and the universal winch eyes. Because of the way the cables work, they will twist when subjected to heavy loads. Preferably use a swivel hook on the winch cable. It is therefore very important that the universal winch eyes VDZ A12 are not fixed. They could then turn with the winch to the correct position. Screw the universal winch eyes VDZ A12 as far as possible on the thread of the pulling pin or adapter and turn them back 1 turn.

If universal swivel winch eyes VDZ DRK01 are used, they should be tightened with the spanner provided. These winch eyes rotate automatically on the component body.

Never use a chain, strop or double jump chain which is too short. A chain or strop that is too short will pull the components of the VDZ system closer together, overloading them sooner. The same applies if the chain or sling is too short, in addition, different forces are exerted on the components.

The use of a snatchblock is important for winching. If you use a snatchblock, make sure that the strap has a working length of 4 metres. This is the distance from the snatchblock to the winch eyes, so you have the right angle and the force is distributed equally on each component.

See schematic drawing below



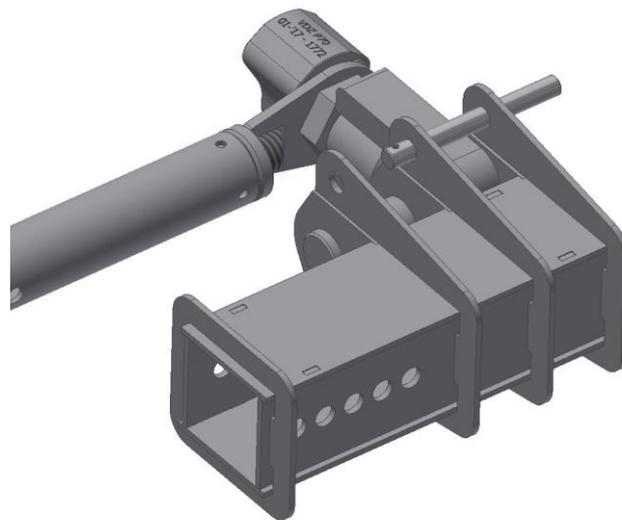


**Following behind the recovery vehicle**

Following a stranded truck behind the recovery vehicle. In this case, you will use the traverse, the hook eyes VDZ A11 and the corresponding lifting brackets that can be mounted on the T-bar. When these components have been mounted in the prescribed manner, the arm of the recovery vehicle should be set to a horizontal and not extended position. Make sure that all locking pins are mounted correctly and that you do not exceed the maximum capacity of the mounted towing pins or towing adapters.

When all the components have been fitted correctly, lift the vehicle to be towed slightly off the suspension of the front axle and then you will have about a three-ton weight on the T-bar. Next, turn the power key to the first accessory position, so that the steering wheel cannot become locked and can rotate freely while driving. This way, there is no need for a driver to take a seat in the vehicle to be towed and the vehicle will follow the recovery vehicle in the same line.

Make sure that the air supply is connected and that the brakes of the vehicle to be towed are reset. When following the recovery vehicle, driving forwards is no problem and it is also possible to drive at speed, however, driving backwards is not possible because of the wheels that will counter-steer. If you have a heavily loaded vehicle following you, we recommend that you brake the vehicle at the command (yellow) connection of your salvage vehicle. This increases traffic safety.



**Lifting and towing with the recovery truck**

Lifting and towing a stranded truck behind the recovery truck. You will then use the spreader bar, the hook eyes VDZ A11 and the corresponding lifting brackets that can be mounted on the T-bar. When these components have been mounted in the prescribed manner, you should set the arm of your recovery vehicle in a horizontal and fully retracted position. Make sure that all locking pins are correctly fitted and that you do not exceed the maximum capacity of the mounted towing pins or towing adapters.

As soon as the front axle is lifted off the ground, the height of the vehicle to be towed will increase, the front axle will drop from its suspension and the arm of your recovery vehicle will no longer be in a horizontal position. VDZ Hefsystemen B.V. therefore prescribes axle straps securing that can be placed around the shock absorbers. In this way, the vehicle to be towed remains hanging just above the ground in the driving position, as it were. If the front axle of the vehicle to be towed is off the ground, the VDZ system can also be used to manoeuvre it backwards. For example, to manoeuvre the vehicle into the workshop. Please note that the arm of your recovery vehicle must always remain horizontal!

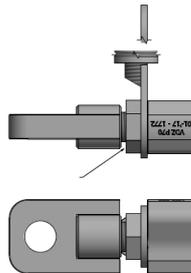
	<p><b>IMPORTANT:</b></p> <p><b>If the vehicle is lifted by the towing pins or adapters and you are under the vehicle for work, always use wheel stands that you can place under the wheels. This is for your own safety!</b></p>
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**Lifting with a crane**

Lifting a stranded truck using a crane. Then you apply the spreader bar, the universal winch eyes, slings, chains and shackles. There are two different types of winch eyes and both have a difference in assembly. This has already been mentioned in the manual and can also be found in the previous chapter "Specifications for towing components". Because of the way the cables travel, they tend to twist when subjected to heavy loads. Therefore it is very important not to tighten the universal winch eyes VDZ A12, as they may rotate and set themselves in the correct position.

Screw the winch eyes VDZ A12 completely onto the thread of the towing pin or towing adapter and turn them back one turn. Do not turn back the winch eyes too much as this will reduce the capacity of the components. The space between the winch eye and the locknut should not exceed 5mm. This is the only way to ensure a good power transfer.

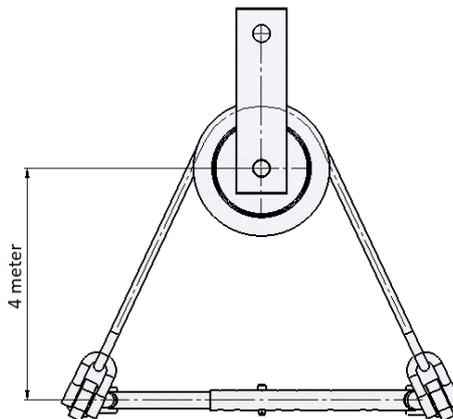


When using the VDZ DRK01 winch eyes, it is important that they are tightened with the spanner supplied.

Never use a chain, strop or double strop that is too short. A chain or strop that is too short will pull the components of the VDZ system closer together, and the components are more likely to be overloaded.

Another disadvantage of a chain which is too short is that the hook of the lifting cable is always close to the cabin and sun visor. It is important to use a snatchblock for lifting. If you use a snatchblock, make sure that the sling has a working length of 4 metres. This gives you the right angle and the force is distributed equally on each component.

See schematic illustration below



This also keeps you clear of the cabin and sun visor with the snatchblock and hook of the lifting cable. Make sure not to exceed the prescribed values of the lifting pins and lifting adapters when lifting. Always use the two attachment points and never lift from a single component.

	<p style="text-align: center;"><b>IMPORTANT:</b></p> <p style="text-align: center;"><b>Never winch, tow or lift with the towing pin or adaptor only half assembled!</b></p>
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### Towing with a tow bar

Towing a stranded truck with the aid of a towing bar. Then use the towing jaw VDZ AK01. Screw the tow coupling as far as it will go on the thread of the tow pin or the tow adapter, set it in the right position and then secure it with the lock nut on the component. Use the enclosed open-end spanner for this. If the towing jaw is mounted correctly, the towing bar can be attached. Please note that after assembling the towing bar, the locking nut of the locking pin must be mounted back.

	<p><b>IMPORTANT:</b></p> <p><b>Do not lift or winch on the towing jaw!</b></p>
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	<p><b>IMPORTANT:</b></p> <p><b>If there is any visual deformation during the work, please stop the work! You are then in the danger zone and exceed the specified capacity of the towing pin or adapter.</b></p>
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	<p><b>IMPORTANT:</b></p> <p><b>Use a snatchblock when winching or lifting. Make sure that the distance from the snatchblock to the winch eye is about 4 metres! Use a sling with a working length of 4 metres.</b></p>
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### Important points for using the VDZ system

- Check VDZ components before use.
- Visually check towing eye in chassis of stranded vehicle.
- Always clean the thread in the towing eyes using a thread cutter.
- Tighten towing pins or adapters with the correct keys and torque.
- Always install a spreader bar.
- Boom of the recovery installation must always be in a horizontal position.
- Always place locking pins correctly.
- Observe the prescribed maximum load of the VDZ components.



## Maintenance and inspections

### Maintenance

Proper maintenance is also very important for this system in terms of functionality and safety. Before using the system for the first time, it is advisable to check all components for defects and to familiarise yourself with the components and their structure. This way, it is easier to recognise a defect at a later stage.

For all threaded fastenings: apply a drop of Teflon oil at regular intervals. This also applies to the threaded traverses. Clean the threads of the towing points in the truck chassis with a thread cutter and also use Teflon oil. This is to ensure that the components of the VDZ system are preserved, that they are fitted correctly and that the prescribed values are achieved.

After use, the components should be cleaned and checked for deformation, damage and hairline cracks. If any defects or suspicious parts are visible, do not use them again until they have been inspected by VDZ Hefsystemen B.V.

### Inspections

Tow pins and/or tow adapters must be inspected each year, this is only possible at VDZ Hefsystemen B.V.

Pull pins or adapters that have been overloaded may have hairline cracks that are not visible to the eyes. If hairline cracks are present on the components, oil and dirt will get in and eventually migrate to the core of the component, causing the component to lose capacity. During the annual inspection VDZ Hefsystemen B.V. carries out a magnetic ultraviolet examination of the towing pins or adapters that reveal the hairline cracks. After each inspection a certificate/report will be drawn up of the findings and the condition of the VDZ System components.

## Education / Training

The VDZ system is a system that is connected to trucks, therefore correct use is of great importance.

It is essential that the manual is read carefully, but also that the operating personnel is well-informed about the correct use and maintenance of the VDZ components. It is important that the personnel is aware of the correct use, operation and safety of the components. VDZ Hefsystemen has the possibility to offer demonstrations, training or Code 95 training. Demonstrations can also be provided at the buyer/customer's location, if desired. For the training courses with obtaining a certificate VDZ Hefsystemen B.V. has entered into cooperation with V-TAS training centre. The training courses which can be followed at the training centre in Bladel (NL) can also be provided on location and abroad, provided there is enough participation. The training will take place under supervision of a qualified user of the VDZ system, V-TAS training or VDZ Hefsystemen B.V.

## Notification of an incident

It is absolutely necessary that VDZ Hefsystemen B.V. be notified of any incident involving the VDZ product. Even if there is no question of damage or injury, you should contact the responsible or appointed VDZ Hefsystemen B.V. dealer by telephone.

Phone number +31 85 0737200 or +31 653186014.

Please note that failure to notify VDZ Hefsystemen within 48 hours of an incident involving a VDZ Hefsystemen product may invalidate the VDZ component guarantee.

## Instructions on protective measures

VDZ Hefsystemen B.V. requires users to wear proper personal protective equipment for all salvage work. In particular, this includes work boots with steel toe caps and gloves. The components of VDZ Hefsystemen are sometimes heavy and may contain sharp edges, which can easily cause personal injury if dropped or struck.



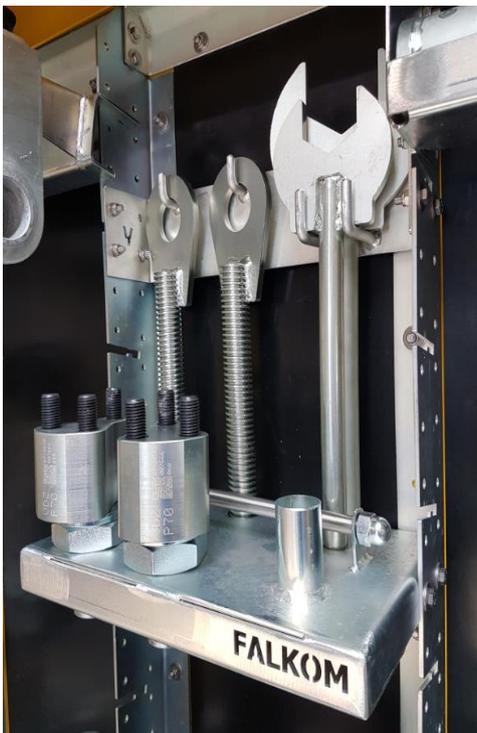
### IMPORTANT:

**Always wear proper personal protective equipment!**



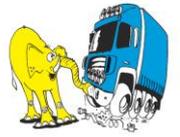
## Storage

For the orderly and safe storage of all components of the VDZ system, VDZ Hefsystemen B.V. has a suitable storage system that can be built into the boxes of the recovery trucks. There are several variants available, where, after cleaning and checking for damage, the components can be placed correctly in the appropriate supports.





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