

Trailer with hydraulic tipper

Translation of the original instructions



Consult manual before use

CE

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 **HENRA**
XPERTS IN TRANSPORT VEHICLES

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PREFACE

The attached manual supports CE guidelines for the tipping function of the trailer. We recommend to familiarize yourself with using the tipping trailer, because operating the tipping function in a safely matter is important. Read and understand the manual **before** you get on the road or use the tipping function of the trailer. With any questions or uncertainties regarding this manual please contact your local dealer.

Yours sincerely,

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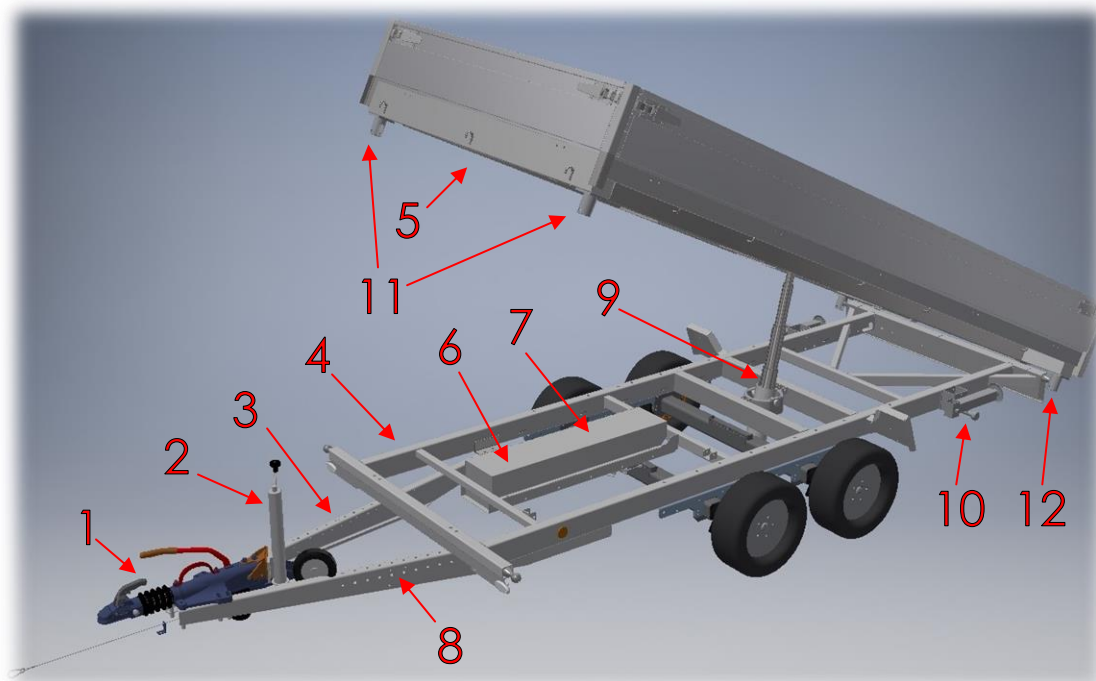
DATA OF THE TRAILER

DESCRIPTION

The Henra tipper is specially designed for the professional user, so for intensive use. The load on the trailer can be unloaded in three directions using a five-stage hydraulic cylinder. The hydraulic cylinder can be operated by hand, an electric motor or both. By simply placing the locking pins on the different locking cones the tipping platform will tip backward or sideways. The tipping platform stops automatically when the maximum tipping angle is reached. The trailer may **only** be operated by an adult with the correct experience and optimal physical condition.

COMPONENTS






Description of all the important components of the 3-way tipper.



1. Coupling	7. Hydraulic pump
2. Jockey wheel	8. Emergency handpump (optional)
3. Drawbar	9. Hydraulic cylinder
4. Chassis	10. Support leg (optional)
5. Tipping platform	11. Locking cone
6. Battery	12. Locking pin






MANUFACTURER DATA

Located on the right draw bar the label off the manufacturer data. The label contains the CE-approval and safety information.

Attentie! Caution! Achtung! Attention!			Model:	Henra Tipper
• Knellingsgevaar		• Accu op tijd laden	Serial number:	See type plate
• Crushing hazard		• Charge the battery on time	Year of construction:	2019
• Quetschgefahr		• Laden sie den akku rechtzeitig auf		
• Risque d'écrasement		• Charger la batterie à temps		
• Elektrische spanning		• Lees de handleiding voor gebruik		MD 2006/42/EG
• Electricity		• Read the manual before use		
• Elektrische spanning		• Lesen sie das handbuch vor dem gebrauch		
• Electricité		• Consulter le manuel/la notice		
				

SAFETY INFORMATION



Number	Symbol	Definition NEN-EN-ISO 7010	Code
1		General safety symbol	W001
2		Warning battery charging	W026
3		Warning entrapment	W019
4		Warning electric charge	W012
5		Consult manual before use	M002

TECHNICAL SPECIFICATIONS

For the technical specifications of the specific trailer read the COC (certificate of conformity) delivered with the trailer.


Hydraulics	Description	Data
	Cylinder	Penta 5-stage 6-12 tons 1230mm (3-way) Penta 4-stage 5-11 tons 1140mm
	Hand pump	OMFB 10ltr 45cc stroke
	Electric pump	Hydroven AMJ-5197 12V 1,6kW
	Battery	12V 90Ah
	Nominal pressure	200 bar
	Pressure relief valve	230 bar (electric pump) 270 bar (hand pump)
	Hydraulic fluid	HPL 32
	Fluid capacity	10 L
	Noise level	< 70 dB(A)
	Maximum tipping angle	48°/1230mm stroke/ Backwards limited stroke end Sideways electronic safety
	Maximum work load	Total loading capacity – empty weight <i>Consult COC for data</i>



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ELECTRIC SCHEME

13- pins Jeager	Description	Color
	1 Left hand indicator	Yellow
	2 Rear fog light	Blue
	3 Ground for pin 1,2 and 4-8	White
	4 Right hand indicator	Green
	5 Right hand tail lights, clearance/ end outline marker lights and registration plate light	Brown
	6 Stop lights	Red
	7 Left hand tail lights, clearance/ end outline marker lights and registration plate light	Black
	8 Reversing light	Pink
	9 Continuous 12V supply	Orange
	10 Controlled 12V supply	Grey
	11 Ground for pin 10	Black/White
	12 -	-
	13 Ground for pin 9	Red/White

TRAILERPARTS

STANDARD PARTS

For any questions contact your local Henra dealer.

Partnumber Henra	Part description	2700 kg	3500kg	3500kg tridem
201-8000110	Knott Axle 1350kg 20° 1150x1640	X		
201-804110	Knott Axle 1800kg 20° 1150x1640		X	X
201-90101	Knott brake compensator Tandem	X	X	
201-90102	Knott brake compensator Tridem			X
201-90203	Knott brake cable 830x1020	X	X	X
201-90207	Knott brake cable 1230x1420	X	X	X
201-90320	Knott coupling 2700kg	X		
201-90330	Knott coupling 3500kg		X	X
201-90400	Wheel bolt M12	X	X	X
213-043	Flatpoint width light with reflector	X	X	X
213-070	Multi 2 left taillight	X	X	X
213-072	Multi 2 right taillight	X	X	X
213-291	Orange reflector	X	X	X
213-389	13-pins yeager cable 6,0mtr	X	X	X
213-401	Battery 12v 90Ah semi-tr. 350x165x185	X	X	X
213-488	Charging plug	X	X	X
216-012	Cylinder 5-stage with restrictor	X	X	X
216-113	Hydrovan hydraulic pump	X	X	X
216-202	Hydraulique hose 2000mm	X	X	X
216-224	Banjo 3/8"bu BSP	X	X	X
216-400	Hydraulic oil HLP 32	X	X	X
221-150	195/50R13C Kargomax ET30	X	X	X
297-222	Brakerod 400mm M10	X	X	X
297-326	Brakerod 1710mm M10	X	X	X
299-002	Jockey wheel 200x50	X	X	X
201-90630	Draw bar 2700kg 2150mm left	X		
201-90631	Draw bar 2700kg 2150mm rechts	X		
201-90640	Draw bar 3500kg 2150mm left		X	X
201-90641	Draw bar 3500kg 2150mm rechts		X	X
299-3391	13-pins yeager plug holder	X	X	X
299-413	Locking cone 14,5mm with plastic seat	X	X	X
299-414	Locking cone 12,5/16,5mm with plastic seat	X	X	X
299-418	Locking pin 14mm + chain	X	X	X
299-419	Locking pin 12/16mm + chain	X	X	X
299-624	Strap hook with nylon locknut	X	X	X
299-711	Brake rod tensioner M10	X	X	X
301-680	Cover hydraulic drip tray	X	X	X



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OPTIONAL PARTS

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Partnumber Henra	Part Description
299-110	Adjustable support leg
004-509	Hydraulic handpump
004-516	Emergency (combination with electric)
003-820	Control case tipping
003-821	Remote control tipping
213-409	External battery charger
005-305	Hand winch PL/KP 185
005-307	Hand winch PL/KP 202
013-120	Set of taillight protectors
005-241	Set of steel ramps 2400x300
005-240	Set of aluminium ramps 2400x300



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GUIDELINES FOR SAFE USE

BEFORE DRIVING

- The driver must check if he is in possession of the correct driving permit for the trailer and towing vehicle.
- Check the correct function of the trailer lights.
- Check if the load is secured properly.
- Check tire pressure, age and load index (specification on the tire side wall).
- Consider the rules and requirements according to the maximum load of the trailer. The maximum load value is the empty weight + load trailer on the trailer. Check identification plate for values.

CONNECTING OR DISCONNECTING TRAILER

Take the following steps into account when connecting or disconnecting the trailer to the towing vehicle. If you don't follow these steps the trailer could disconnect while driving and cause an accident. Follow the steps in the right chronological order.

↑ Disconnect
↓ Connect

- Check if the emergency brake cable is frayed, noded or missing. Replace the cable before use.
- Check if the tow bar ball head is clean and the coupling is sufficiently greased.
- The trailer must be on a levelled ground surface and the brake enabled.
- Turn the jockey wheel in a clockwise direction until the trailer coupling is above the tow bar.
- Manoeuvre the towing vehicle in line with the trailer and the coupling directly above the tow bar.
- Connect the emergency brake cable. It is recommended to attach the cable to an existing mounting point and not the tow bar. Unless there is no existing mounting point.
- Push the release button of the coupling lever and turn the jockey wheel counter clockwise to lower the coupling on the tow bar and release the lever.
- Lift the coupling to secure the connection of coupling and tow bar. If the rear of the towing vehicle moves accordingly the trailer is correctly attached.
- Rotate the nose wheel clockwise until the wheel is in its highest position. **Beware** that the wheel doesn't hit the brake rods.
- Connect the electrical connector to the towing vehicle and check the trailer lights.
- Release the trailer brake.

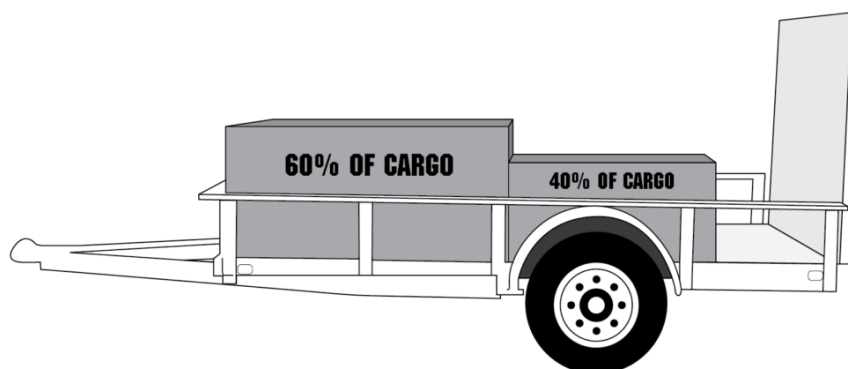
DRIVING

Consider the following steps before/during driving with the trailer for road safety.

- Check if the coupling is secured, the emergency brake cable is connected and the trailer lights are working accordingly.
- Check if the locking pins are secured into the locking cones and the hydraulic cylinder is lowered.
- Check if the jockey wheel is locked into position.
- Check if the load in the trailer isn't higher than the gross weight. The centre of gravity of the load must be as low as possible above the axles to optimize the road performance and braking effect. Distribute the load evenly over the length of the trailer.
- Consider the rules and requirements according to the maximum load value of the trailer. The maximum load value is the empty weight + load on the trailer. Check identification plate for values.
- Make sure the maximum nose weight isn't exceeded and the minimum nose weight is respected.
- Check tire pressure, age and load index (specification on tire wall).
- **Never** exceed the local maximum towing speeds. The national rules of every country must be followed.
- **Never** exceed the maximum towing capacity and make sure the draw bar is as level as possible to prevent sway.
- Passengers are **not** allowed on to the trailer while driving!
- Adjust your driving and speed accordingly to specific road conditions! Be aware of weather, bumpy roads and dirt.

LOADING AND UNLOADING

With loading and unloading the trailer, it is advised to have the trailer connected to the towing vehicle and on the emergency brake. The load must be as centre-positioned over the width of the trailer and the centre of gravity as low as possible above the axles to optimize the road performance and braking effect. The used loading tools must require the EN 12915-norm.



TIPPING THE TRAILER

Before tipping the tipping platform the following guidelines must be taken into account. **Read tipping instructions before tipping!**

- The operator has read and understood the instruction manual.
- All people but the operator aren't in close range of the trailer during tipping.
- The trailer needs to be at a standstill, the brake enabled and connected to the towing vehicle before tipping. It is advised to use supporting legs and wheel supports when the stability of the trailer isn't guaranteed.
- The surface where the trailer is placed is levelled enough to perform tipping in a safe matter. If this is not the case the operator needs to secure the stability of the trailer.
- The locking pins of the locking cones and sideboards need to be secured when performing a tipping function.
- The tipping platform must be unobstructed to perform safely tipping function. Watch for entrapment of the tipping platform, frame or boards during tipping.
- Hoses, mounting points, oil, and battery need to be checked before activating the tipping function.
- During working activities make sure there is enough lighting.
- During tipping the trailer lights may not be visible. Take cautions by placing warning triangle or placing lights behind the trailer if tipping is used on a public road.
- If your trailer is fitted with a remote control for the tipping function. **Always** be aware off the surrounding working field!



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TIPPING INSTRUCTIONS

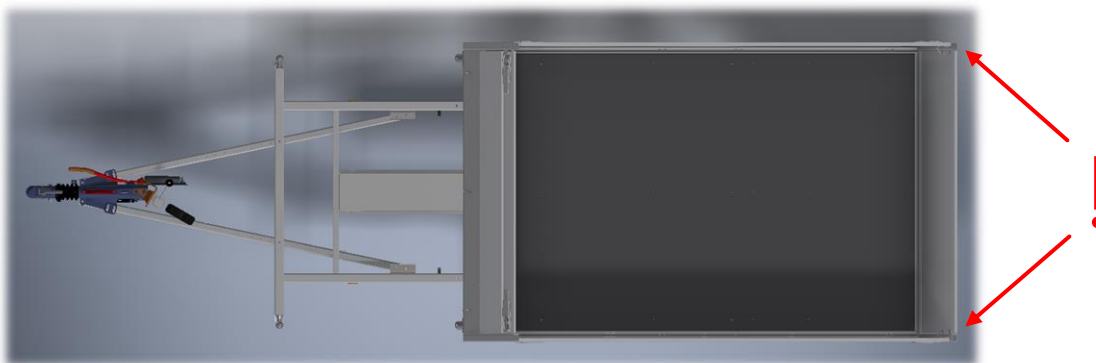
The Henra 3-way tipper can tip backwards, left side and right side. By moving the locking pins in the locking cones the three different tipping functions can be engaged. **Don't** tip the tipping platform forward, because it **will** damage certain trailer components.

Always secure the two locking pins before performing a tipping function or driving with the trailer! *Move the small pin on the locking pin past the hole and attach the chain!*



BACKWARDS TIPPING:

Secure both locking pins in the rear locking cones. Be aware the locking pins are different size. Secure chain before tipping. With the locking pins in place the tipping platform will tip backwards.



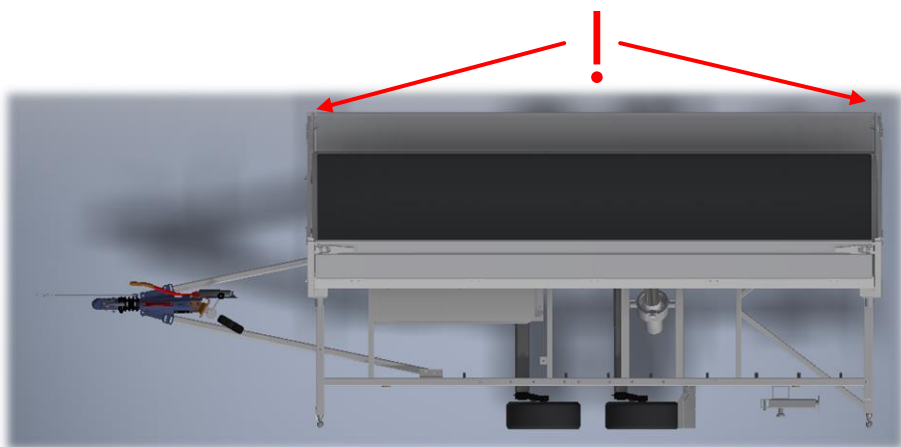
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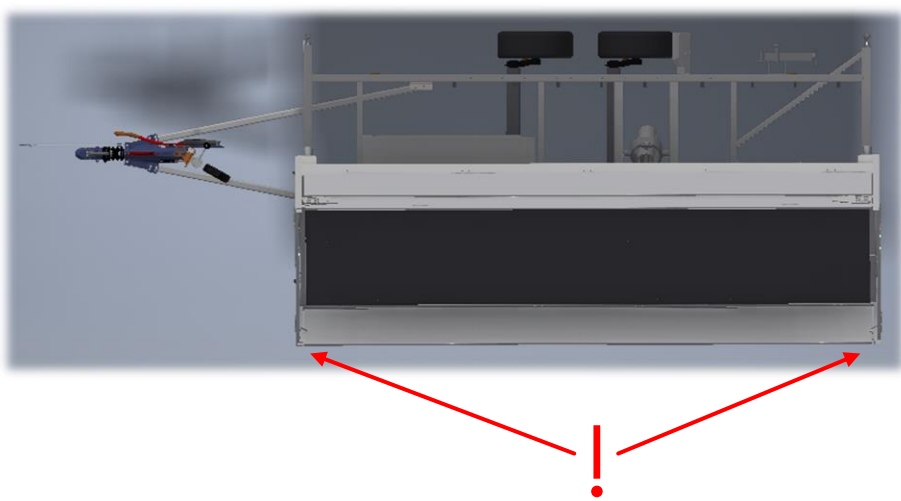
TIPPING RIGHT:

Move the left locking pin to the right front locking cone. Lock the pin in place and attach the chain. With the locking pins in place the tipping platform will tip to the right side.



TIPPING LEFT:

Move the right locking pin to the left front locking cone. Lock the pin in place and attach the chain. With the locking pins in place the tipping platform will tip to the left side.



Before driving always secure the two locking pins!

SAFETY & ENVIROMENT

Follow these safety and environmental rules;

- Check if the tipping platform and loading platforms are locked in place. Before and after the use of the tipping function.
- Check if the tow bar is correctly secured to the towing vehicle.
- Check tire pressure, age and load index (specification on tire wall).
- Make sure the maximum tow bar force isn't reached and the minimum tow bar force respected.
- Check before driving if the jockey wheel is turned up and secured.

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MAINTENANCE

We recommend that you have your trailer serviced by a Henra dealership. You are responsible for any maintenance. We recommend you follow the following maintenance timetable.

Frequent	Part	Check	Action
Check before first use	Battery	Liquid	If needed top up
	Hydraulic pump	Oil level or leakage	Fill up oil or repair leakage
	Hydraulic components	Damage	If damaged, replace
Every 6 months	Hinge cone	Plastic inlayer	If damaged, replace cone
	Hinge ball	Grease	Grease ball
	Locking pins	Damage	Replace pins
Every Year	Full trailer	Tipping components	Service at a Henra dealer
		Brakes	
		Tyres	
		Lights	

Also follow the maintenance manual that is delivered with the trailer.

Note: When performing maintenance on the tipping platform use supports to prevent entrapment! All tipping trailers are fitted with a standard support located at the left front.



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TROUBLESHOOTING

The user needs to take all safety instructions in to account when troubleshooting the trailer. When there is a problem with the trailer follow the instructions for solving certain problems:

Problem	Possible cause	Possible solution
Tipping function	Battery low voltage	Charge or replace battery
	Hydraulic pump stopped working	Check electronics for interruptions
	Hydraulic components leak	Replace hydraulic component
	Not enough hydraulic fluid	Check for leaks, refill hydraulic fluid
Decline speed platform	Dirty decline valve	Contact local Henra dealer to clean valve
Trailer lights	Defect light bulb	Replace light bulb
	Defect DC connector	Replace DC connector
	Break in electric cable	Connect break or replace cable
	Faulty jeager connector	Replace jeager connector
	No signal from car	Check signal output at your local car dealer
Brake system	Brake cable broken or stuck	Replace brake cable
	Brake drum parts worn	Replace brake drum parts
	Faulty inertia brake	Replace inertia brake



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END LIFECYCLE

The trailer contains some environmental hazardous materials (oil, grease, acid). These materials need to be removed or disposed to confirm environmental regulations.

- Oil and grease can be disposed at a registered collection point, confirm EU-guidelines 2008/98/EG
- The dispose of batteries can be returned to manufacturer/supplier confirm EU-guidelines 2006/66/EG
- Electric components can be disposed at a waste processing company confirm EU-guidelines 2012/19/EU

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EU DECLARATION OF CONFORMITY

We hereby declare that trailers of the types listed below, produced by Henra Aanhangwagens B.V. and fitted with a specific hydraulic tilting system for tipping the trailer's load comply with the applicable European directives and standards.

The relevant trailers described as type:

K1, K3, KP3Z, KP20, KP27 and KP35

Produced by:

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Oploseweg 10
5825 HN Overloon
The Netherlands**

to which this declaration relates complies with the applicable provisions of the Machinery Directive 2006/42/EC, and where appropriate 2014/30/EU (EMC)

Applied standards:

NEN-EN-ISO 12100:2010	Safety of machinery – Basic concepts for design – Risk assessment and risk reduction.
NEN-EN-ISO 4413:2010	Hydraulic engineering safety requirements for hydraulic and pneumatic systems and their components.
NEN-EN-IEC 60204-1:2008	Safety of machinery – Electrical equipment of machines – Part 1: General demands.
EN 1853:2017	Agricultural machinery - Trailers with a tipping body - Safety

Overloon, 28-10-2019

Name: R.J. Poldervaart

Position: Managing Director

Handtekening:



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