

Jumbo VR2 and VR4

Manual Bale grab





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1. Introduction

The Meijer Holland bale grabs of the type 'Jumbo VR' are designed to be attached to a telescopic handler, front loader, wheel loader or forklift (hereinafter referred to as 'vehicle') in order to grab and transport wrapped bales over a short distance. The bale grab is equipped with a hydraulic circuit that is to be connected to the hydraulic system of the vehicle



It is important to read the manual carefully before using the machine. There could be a risk of serious injury or damage to the environment if the bale grab is not used properly. Moreover, damages to the material or to the machine might occur. It is therefore important to follow the instructions of this manual.



2. Technical specifications

Features		Jumbo VR2	Jumbo VR4
height, incl. frame cm		130	130
width	cm	200	300
weight	kg	530	825
arm's length	cm	112	120
volume hydraulic circuit	ltr	ca. 3	ca. 5
max. load per bale	kg	800	800
max. number of bales		2	4
max. pressure hydraulic circuit bar		180	180



When using a vehicle with a pressure higher than 180 bar, it is strongly recommended to use a pressure relief valve. This is available at Meijer Holland.

CE-marking

This machine is certified with the CE-marking. This means that the machine meets the requirements of the applicable EC directives on safety and health. These directives are specified in the attached declaration of conformity.



- The non-observance of the rules and instructions stated in this manual is to be considered as serious negligence which leads to the extinguishment of any liability on the part of Meijer Holland concerning the resulting consequences. In this case, the risk lies exclusively with the user.
- Meijer Holland is constantly busy with the improvement of its products. Therefore, it also reserves the right to make any changes that are considered necessary. There is no obligation to apply these changes to earlier delivered machines.



3. Safety precautions

The following precautions are important to prevent injuries and damages.

- 1. Read the manual before use.
- 2. Only experts should (dis)mount the bale grab to the vehicle.
- 3. Only experts should operate the bale grab.
- 4. Use the bale grab only for bales.
- 5. Check whether the hydraulic system is working well right after having mounted the bale grab.
- 6. Follow the instructions for use (chapter 6).
- 7. The working area of the machine is five meters:
 - no persons are allowed within that range!
- 8. Operate the bale grab exclusively from the cabin of the vehicle.
- 9. Mind the rules for max. load (chapter 2).
- 10. Be aware of oil leakage:
 - check the hydraulic hoses and cylinders at least once a day
- 11. Replace damaged or worn wires and cylinders immediately.
- 12. Follow the instructions for maintenance (chapter 7).
- 13. Take into account that the sight of the driver is limited when there are bales in the bale grab.
- 14. When driving longer distances or driving on a public road:
 - no bales are permitted in the bale grab!
- 15. Drive straight backwards after having moved the bales.
 - make sure that there are no people behind the vehicle.



Build the stack of wrapped bales in a stable way so that it cannot fall over. The driver must be aware of the rules that apply to the lifting and hoisting of heavy loads.



4. The functioning of the bale grab

Mount the bale grab to a vehicle with a hydraulic system. The bale grab only works when it is attached correctly to the hydraulic system of the vehicle.

The clamping of wrapped bales takes place with grab arms that are powered by hydraulic cylinders. Two grab arms slide outwards, each under pressure from a cylinder. This movement can be seen in the figure below.





movement grab arms Jumbo VR2







movement grab arms Jumbo VR2



movement grab arms Jumbo VR4



5. Installation, starting up, adjustment



Check if the bale grab is undamaged and in good condition on delivery. Please contact Meijer Holland if you notice any damages. Use the grab only if it is found to be in good order and after this manual has been read.

5.1 After delivery

Place the bale grab on a solid and even ground.

5.2 Before moving the bales

- 1. Assemble the mounting parts.
- 2. Drive the vehicle in such a way to the bale grab that the mounting surface of the vehicle falls against the mounting point of the bale grab.
- 3. Attach the bale grab to the vehicle.
- 4. Check the couplings for dirt. Attach only clean couplings to prevent dirt from entering the system.
- 5. Connect the two correct hydraulic hoses of the vehicle to the two quick release couplings above the mounting point of the bale grab. The upper hose is for clamping the bales and the lower one is for releasing them.
- 6. Check for leakage.
- 7. Check the correct control of the cylinder from the hydraulic system.
- 8. Put the hydraulic system under pressure and test the bale grab by opening and closing the hooks.

5.3 After moving the bales

- 1. Place the bale grab with the vehicle on a solid and even ground.
- 2. Check whether the bale grab stands steady.
- 3. Disconnect the hydraulic hoses and check them for leakage.
- 4. Dismount the junction of the vehicle from the bale grab and drive the vehicle away in reverse.



Store the grab in a dry and clean environment until the next use.



6. Operation and use

- 1. Drive the vehicle to the bale and open the grab arms by operating the hydraulic system.
- 2. Keep driving until the bale is located between the two grab arms.
- 3. When the frame pushes against the bale, the hydraulic system can be operated.
- 4. Once the bale is clamped, put the hydraulic system back into 'neutral'. Repeat these actions to pick up a second bale with the VR4.
- 5. Lift the bale and drive the vehicle to the place of destination or to the next bale.
- 6. For the second bale (VR2) or the third bale (VR4): drive in such a way to the bale that the clamped bale hangs above the bale that still needs to be grabbed.
- 7. Lower the bale grab so that the bales are stacked on top of each other.
- 8. Operate the hydraulic system and lower the grab arm. The lower bale is located straight between the grab arms and the upper bale is supported by the frame.
- 9. The grab arms can now be closed again. Lift both bales and drive to the place of destination. (VR2) or lift the three bales and drive to the fourth bale. Repeat the last operation to pick up the fourth bale (VR4).
- 10. Lower the bales onto the loading floor and set the hydraulic system to 'return'. This will open the arms and release the bales.
- 11. Drive the vehicle away from the bales in reverse.
- 12. The bale grab is ready to grab and move another series of bales.











use Jumbo VR4



7. Maintenance

Regular maintenance extends the life span. The bale grab needs relatively little maintenance.

Maintenance schedule

Before every use	Check the bale grab for damages and wear. Replace damaged or worn parts.		
	Check the hydraulic couplings, hoses and cylinders for leakage, wear and damages. Let problems be fixed immediately by a competent mechanic.		
At least once a week	Clean the grab of caked dirt and dust. When using a high-pressure washer, avoid the electrical parts.		
	Put grease on the grease nipples. At extensive use: after every eight working hours add a bit of grease (0,86 grams per grease nipple).		
	Check the grab arms for damages to prevent damages of the wrapped bales.		



8. Problems and solutions

The bale grab has relatively few moveable parts and damages are unlikely to occur when used properly. Repair or replace damaged and worn parts immediately. Spare parts are available at Meijer Holland.



- Turn off the engine of the vehicle while you are fixing one of the belowmentioned problems.
- Turn off the power supply during welding.
- Hydraulic fluid is a poisonous liquid that is harmful to the environment. Never
 try to shut a leak with your hand. Fluid under high pressure easily penetrates
 through skin and clothing and can cause serious injuries.

Problem	Possible cause	Solution	
The grab arm is not moving.	The hydraulic circuit of the bale grab is not attached to the hydraulic system of the vehicle.	Attach the two hoses.	
	The hydraulic circuit of the bale grab is not attached correctly.	Exchange the wrongly attached hydraulic hoses.	
	Malfunction in the hydraulic system of the vehicle.	Consult the manual of the vehicle.	
	The grab arm is blocked.	Look for the blockade and remove it.	



9. Environment and disposal

The bale grab has a hydraulic circuit that contains hydraulic fluid, a poisonous liquid that is harmful to the environment. Regularly check the bale grab for leakage and replace damaged or worn parts immediately.

9.1 Disposal of the bale grab

- Drain the hydraulic system and let the fluid be disposed by an authorized company.
- The rest of the bale grab is made of coated steel and can be disposed of as scrap.



CE-Declaration of conformity

We, Meijer Holland Bale handling systems Duinkerkenstraat 11 NL-9723 BN GRONINGEN Nederland

Tel: +31 (0)50 - 312 64 48

declare under our sole responsibility that:

1. we are the manufacturer of:

MH Jumbo VR2 (model MHVR02) MH Jumbo VR4 (model MHVR04)

2. the machine complies with the following applicable directives:

Machinery directive 2006/42/EG

- 3. the machine is designed and constructed according to European standards, including:
- NEN-EN-ISO 13854:2019
- EN-ISO 4413:2010
- EN-ISO 12100:2010

The electrics and the control section are the responsibility of the customer.

Groningen, 10 July 2023

J.F. Lommerts, director