



**VESUVIUS VANTAGE
REAR DISCHARGE SPREADERS**
OPERATING & SAFETY INSTRUCTIONS

For all spare parts please visit:

www.marshall-trailers.co.uk

For all VES1500 / VES2000 / VES2500 models

Charles J. Marshall (Aberdeen) Ltd
Chapel Works, Bucksburn, Aberdeen AB21 9TL

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EC Declaration of Conformity

Charles J. Marshall (Aberdeen) Ltd of
Chapel Works, Bucksburn, Aberdeen, AB21 9TL United Kingdom

Declares that the product:

Make: Charles J. Marshall (Aberdeen) Ltd

Type: Marshall Rear Discharge Spreader

Model: Model Name

Serial No: 1234567890

Conforms to the essential health & safety requirements of 98/37/EC
machinery directive as amended by 2006/42/EC directive.

Place of Issue: Chapel Works, Bucksburn, Aberdeen, AB21 9TL United Kingdom

**Name & Title of
Authorised Person:**

Charles R. Marshall Managing Director

Date:

We enclose our instructions for the safe operation of this machine,
the working of which is fully understood by the undersigned

Customer Signature:

Date:



SAFETY INSTRUCTIONS

IMPORTANT SAFETY ADVICE: STOP. THINK. CALL 01224 722777

Safety First: Please read and fully understand the contents of this instruction manual, if you are in any doubt whatsoever about the safe operation of this machine, please contact Charles J. Marshall (Aberdeen) Ltd on Tel. 01224 722777.

OPERATING INSTRUCTIONS

Attaching the Vesuvius Vantage to your tractor:

1. All models are 1000 RPM PTO speed and must be used in this mode.
2. The PTO shaft supplied with each Vesuvius Vantage is the longest length required for any tractor on which we expect our spreader to be used. Because of the wide variety of tractors, the accurate fitting of each shaft is crucial.
3. N.B. Safety is important; if you are in any doubt of how to fit the PTO shaft, please contact our service department.
4. Ensure that the shear pin fitted is a genuine Marshall item; failure to use the correct pin can cause serious damage (Part No. 052/20-8000).

Hydraulic hoses:

1. All hoses must be clean prior to fitting to tractor.
2. Ensure all hoses are fitted securely to the tractor; not forgetting the **brake hoses**.
3. Requirements are two double acting spool valves and one brake hose.

MAINTENANCE INSTRUCTIONS

Tractor power requirement:

1. The minimum tractor power requirement for the VES 1500 is 80HP, VES2000 is 100HP and VES2500 is 135HP based on tests carried out on reasonably level ground and under normal load conditions.
2. By carrying out extensive tests and trials, we are satisfied that the gears selected give the maximum in performance and reliability.



Maintenance:

1. Check tyre pressures regularly (See page 11).
2. If the muck spreader is not to be used for a considerable period of time, the following tasks should be carried out to maintain it in good condition.
 - (a) Clean the spreader thoroughly.
 - (b) Return the main door all the way back.
 - (c) Close the slurry door.
 - (d) Touch-up any scraped or damaged paintwork.
 - (e) Grease all bearings and run the spreader for 5 minutes.
 - (f) Apply grease along exposed push door runners to keep them free of rust and corrosion.

Shear pins:

1. The shear pin is M10 x 55 - 8.8 hard (Part No. 052-01-10X55)
2. **WARNING** - When replacing broken shear pins care must be taken to remove all broken parts, eliminating the risk of damage.

MAIN GEAR BOX

Oil level plug is visible through the bottom hole in the rear of the spreader and should be checked after the first 40 hours of work. Fill with SAE90 grade gear box oil through the top hole and change after 1000 hours use, or once a year, whichever is sooner. Oil can be drained through a sump plug on the bottom of the gear box.





REAR BEATER TIPS

These are fully reversible and are fitted firstly to assist breaking up of the muck, but also help to protect your main rotor from premature wear. Running the tips past a reasonable working condition inevitably results in a false economy. Tip wear should not exceed 25mm or 1". Replacement tips are available under Part No. 065-12-1005.



Grease nipples:

There is a total of nine (VES1500) or ten (VES2000, VES2500) grease nipples on the machine:

1. Five or six grease nipples are on the machines, depending on the model.
2. Four grease nipples are located on the two PTO shaft.
 - (a) Two of the four on the front PTO shaft.
 - (b) Two of the four on the rear, gearbox PTO shaft under the machine.
3. Five or six grease nipples on the bearings, depending on the model.

These are greaseable from the remote grease point situated on the front plate to the left of the PTO shaft and on the rear near side panel.





Wheel nuts:

1. Ensure that wheel nuts are tightened up daily for the first week and as necessary from then on.
2. Wheel bearings are to be checked after the first 20 hours work and every 100 hours thereafter.

OPERATING INSTRUCTIONS

1. Always disengage PTO shaft when turning.
2. Engage and disengage PTO shaft at low engine revs.
3. Familiarise yourself with the controls and handle positions.
4. When operating a Vesuvius Vantage muck spreader for the first time, we recommend that you do not overfill it and operate it slower rather than faster.
5. Select the correct main pushing door ram speed by following the instructions on page 8.

Main door ram adjustment:

The speed of the main pushing ram is controlled from the four flow control valves located on the valve chest located above the pushing ram in a galvanized enclosure.

There are 4 stages on the ram and each flow control valve corresponds to a stage:

Stage 1 – This is the largest diameter stage of the ram and is controlled by the flow control valve with the number 1 above it. This stage of the ram should extend first.

Stage 2 – This is the second largest diameter stage of the ram and is controlled by the flow control valve with the number 2 above it.

Stage 3 – This is the third largest diameter stage of the ram and is controlled by the flow control valve with the number 3 above it.

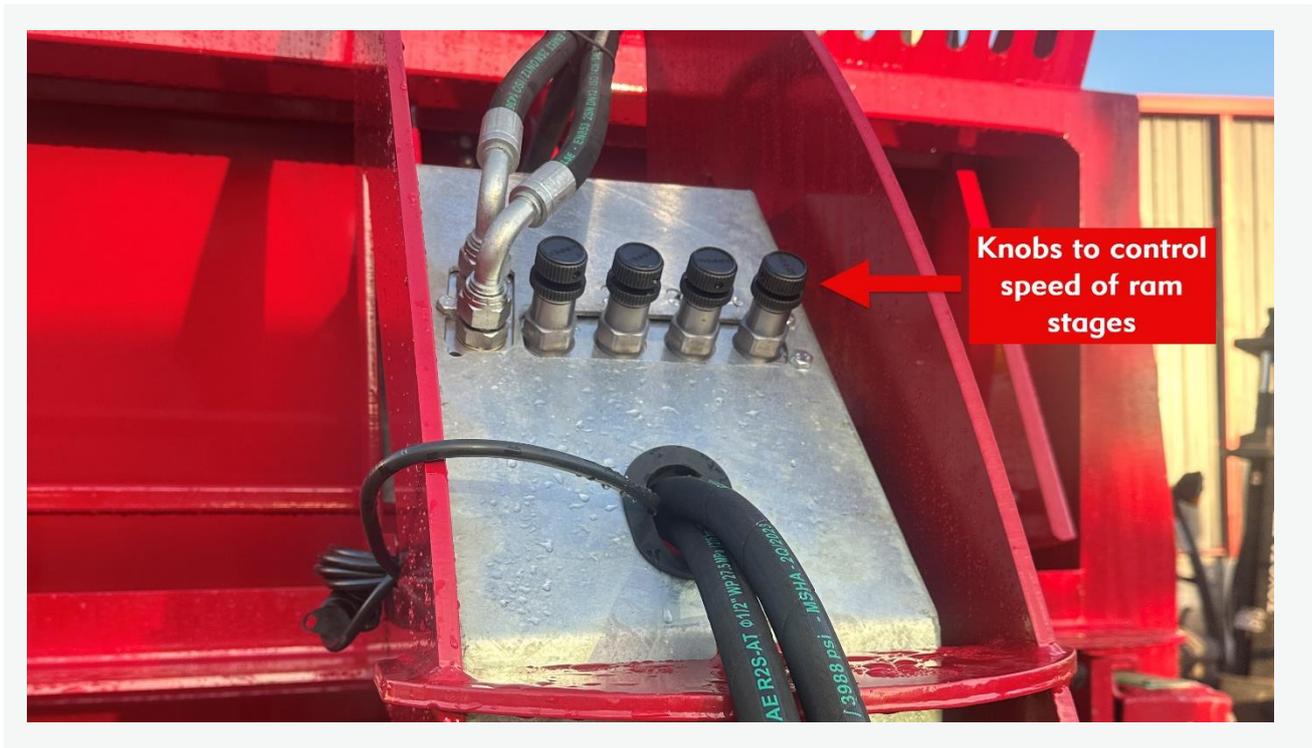
Stage 4 – This is the smallest diameter and final stage of the ram and is controlled by the flow control valve with the number 4 above it.

When setting the speed we recommend only adjusting the speed of the current stage of the ram that is extending, for example if stage 2 is extending only adjust the flow control valve marked number 2. This allows the operator to easily see the difference in speed the adjustment of the flow control valve is having and ensure the correct speed of that stage can be set.

To increase the pushing ram speed turn the flow control valve knob for a particular stage anti-clockwise; to decrease the speed turn the knob clockwise. This should be repeated for each stage of the ram until the desired ram speed is achieved; remember each stage can only be controlled by the corresponding flow control valve.

In addition, a video located in the downloads section of our website further explains this:

<https://www.marshall-trailers.co.uk/downloads/videos>



Further operating instructions:

1. The hydraulic main push door must **NOT** be used to push the material backwards when loading in order to obtain larger capacity.
2. Start the PTO at low engine revs and run it at 1000 RPM. Then open the slurry door if you have one fitted.
3. The spread of material can be controlled by forward ground speed or by increasing or decreasing the main door speed.
4. Once the load is discharged completely, start returning the main pushing door taking it away from the rear beaters.
5. Close the slurry door watch out for obstacles caught below the door (only after the main door is back).

SLURRY DOOR

When a slurry door is fitted to a Vesuvius Vantage, the following safety items must be noted.

1. Always shut off the tractor engine prior to entering the Vesuvius Vantage.
2. Never stand on the top of the machine's sides to fit the door. This must be carried out standing on the floor where access is available by the fixed ladder both, inside and out.
3. Ram pins should be fitted with the use of a secured ladder, **DO NOT** climb on the machine.



Service points:

Try to avoid using the door when solid muck is being spread.
Using the door can lead to problems feeding the material to the rear beaters.

Once the slurry door has been fitted the first time, removing the hydraulic hoses is not necessary when you remove the slurry door for short periods in order to handle different types of material.

To remove the slurry door, simply remove the pins. Two pins are all that is required to be removed and replaced making the operation very simple and efficient



ALWAYS close the slurry door after spreading, this firstly protects the ram and avoids unnecessary stress on the door slides when travelling.

NEVER close the slurry door until the main door has retreated away from the beater.

**FOR EXPERT ASSISTANCE PLEASE CALL:
01224 722777**

**FOR SPARE PARTS GO TO:
www.marshall-trailers.co.uk**



TYRE PRESSURE CHART

| PART NUMBER | SIZE | MAX. HEIGHT | SPEED | MAX. TYRE PRESS. |
|--|--------------------------|-------------|---------|------------------|
| PLEASE NOTE THIS CHART IS FOR REFERENCE ONLY EACH TYRE BRAND CAN HAVE DIFFERENT RATINGS. | | | | |
| 083-01-26-12 | 26 x 1200 x 12 | 800kg | 25km/h | 20psi |
| 083-01-100-12 | 10.0/80x12 10ply | 1000kg | 30km/h | 45psi |
| 083-01-100-15 | 10.0 x 15.3 | 1500kg | 30km/h | 52psi |
| 083-01-115-15 | 11.5 x 15 | 2000kg | 30km/h | 52psi |
| 083-01-125-15 | 12.5 x 15.3 | 2650kg | 40km/h | 60psi |
| N/A | 15/70 x 18 | 3200kg | 40km/h | 75psi |
| 083-01-15-22.5 | 15 x 22.5 (385/65R 22.5) | 4500kg | 80km/h | 90psi |
| 083-01-400R-60 | 400R-60x22.5 | 4500kg | 80km/h | 90psi |
| 083-01-1555-17 | 15-55 x 17 | 2120kg | 40km/h | 52psi |
| 083-01-1670-20 | 16/70 x 20 | 3000kg | 40km/h | 49psi |
| 083-01-165-70 | 16.5 x 70 x 18 | 3200kg | 40km/h | 54psi |
| N/A | 18 x 22.5 | 5800kg | 80km/h | 90psi |
| N/A | BN2 340/457-1300 x 18 | 2600kg | 40km/h | 60psi |
| N/A | BN3 1300 x 530 x 533 | 4500kg | 40km/h | 53psi |
| N/A | BN4 22/70-20 | 4500kg | 40km/h | 33psi |
| 083-01-340-65 | XP27 Radial 340/65R 18 | 2650kg | 90km/h | 72psi |
| 083-01-400-60 | 400-60 x 22.5 | 4000kg | 40km/h | 51psi |
| 083-01-550-45 | 550-45 x 22.5 | 4375kg | 40km/h | 41psi |
| 083-01-560-45 | 560-45 x 22.5 | 4575kg | 45km/h | 58psi |
| 083-01-560-60 | 560-60 x 22.5 | 5595kg | 50km/h | 58psi |
| 083-01-500-60 | 500-60 x 22.5 | 5450kg | 40km/h | 41psi |
| 083-01-550-60 | 550-60 x 22.5 | 5300kg | 40km/h | 44psi |
| 083-01-445-45 | 445-45 X 19.5 | 4500kg | 100km/h | 100psi |
| 083-01-335-50 | 355-50 X 22.5 | 4550kg | 80km/h | 100psi |
| 083-01-184-30 | 18.4 x 30 14 pr | 3550kg | 40km/h | 39psi |
| 083-01-184-34 | 18.4 x 34 14 pr | 3650kg | 40km/h | 36psi |
| 083-01-231-26 | 23.1 x 26 | 3950kg | 40km/h | 36psi |
| 083-01-281-26 | 28.1 x 26 | 6100kg | 40km/h | 33psi |
| 083-01-305-32 | 30.5 x 32 | 7100kg | 40km/h | 39psi |
| 083-01-750-60 | 750 x 60 x 30.5 | 8500kg | 40km/h | 60psi |



Marshall Pre-delivery Inspection Check

Dealer Name:

Customer Name:

Address & Post Code:

Model:

Serial Number:

Check

Completed

Check tyre pressure (See chart on page 10)

Tighten wheel nuts

18mm stud diameter = 270Nm & 22mm stud diameter = 475Nm

Grease hubs

Check external wheel pressure (Ensure no side movement on wheels)

Check all securing bolts

Check lights (If applicable)

Check for damaged paint & touch up if necessary

Check brake rams (Extend & return freely)

Check rams & hydraulic hoses for leaks

Check rear gearbox oil level through sight-glass

Grease the door guides for the pushing door

Grease drive-line bearings

Check rear PTO shaft guard is secured to spreader

Ensure relevant paperwork is completed & handed to the operator

Signed:

Date:

General overall condition satisfactory

To be returned when completed:

Email: admin@marshall-trailers.co.uk

Post: Charles J Marshall (Aberdeen) Ltd
Chapel Works, Bucksburn, Aberdeen AB21 9TL.