



## VESUVIUS VANTAGE – REAR DISCHARGE SPREADER

**OPERATING & SAFETY INSTRUCTIONS**

**FOR SPARE PARTS GO TO  
WWW.MARSHALL-TRAILERS.CO.UK**

**FOR MODELS:  
VES1500, VES2000, VES2500**



**CHARLES J. MARSHALL (ABERDEEN) LTD**  
**CHAPEL WORKS, BUCKSBURN, ABERDEEN, AB21 9TL.**  
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**EC DECLARATION OF CONFORMITY**

**WE: CHARLES J. MARSHALL (ABERDEEN) LTD**

**CHAPEL WORKS, BUCKSBURN, ABERDEEN, SCOTLAND, AB21 9TL.**

**DECLARE THAT THE PRODUCT:**

**MAKE: CHARLES J. MARSHALL (ABERDEEN) LTD**

**TYPE: MARSHALL REAR-DISCHARGE SPREADER**

**MODEL: \_\_\_\_\_**

**SERIAL NO: \_\_\_\_\_**

**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, SCOTLAND, AB21 9TL.**

**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'S SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_**

## **SAFETY INSTRUCTIONS**

### **Important Safety advice!**

- 1. STOP**
- 2. THINK**
- 3. CALL 01224 722777**

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

#### **Attaching the Vesuvius Vantage to your Tractor:**

All models are 1000 RPM PTO speed, and must be used in this mode.

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.

N.B. Safety is important; if you are in any doubt of how to fit the PTO shaft, please contact our service department.

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:**

All hoses must be clean prior to fitting to tractor.

Ensure all hoses are fitted securely to the tractor; not forgetting the **brake hoses**.

Requirements are two double acting spool valves and one brake hose.

## **MAINTENANCE INSTRUCTIONS**

### **Tractor Power Requirement**

The minimum tractor power requirement for the VES 1500 is 80HP, VES2000 is 100HP and VES2500 is 135HP.

This recommendation is based on tests carried out on reasonably level ground and under normal load conditions.

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).

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. Return the main door all the way back.
- (b) Close the slurry door.
- (c) Touch-up any scraped or damaged paintwork.
- (d) Grease all bearings and run the spreader for 5 minutes

### **Shear Pins**

The shear pin is 10mm x 8.8 hard (Part No. 052/20-8000)

**WARNING – When replacing broken shear pins care must be taken to remove all broken parts, eliminating the risk of damage.**

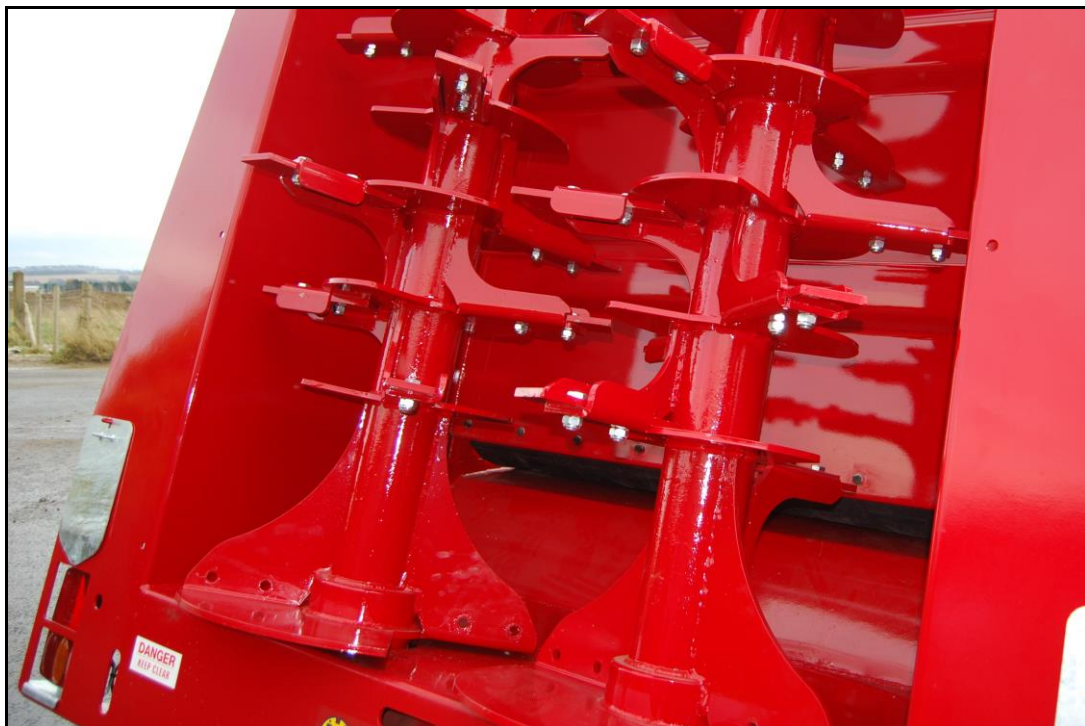
**Main Gear Box:**

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. **See photo below.**



**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. 065/12-1000. **See photo below.**



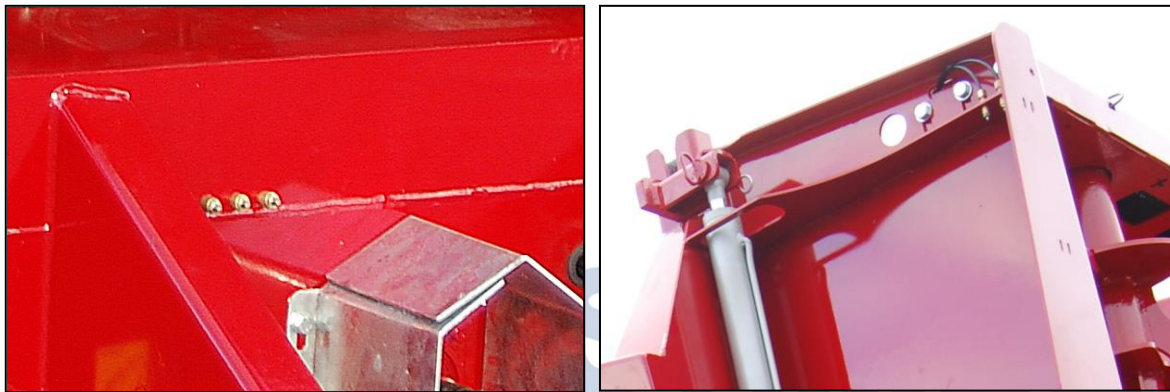


### **Grease Nipples:**

There is a total of ten (VES1500) or eleven (VES2000, VES2500) grease nipples on the Vesuvius Vantage:

- Six or seven grease nipples are on the machines, depending on the model.
- four grease nipples are located on the two PTO shaft.
  - Two of the four on the front PTO shaft.
  - Two of the four on the rear, gearbox PTO shaft under the machine.
- One grease nipple on the speed control mechanism.
- 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.



Engineering excellence for 60 years

### **Wheel Nuts:**

Ensure that wheel nuts are tightened up daily for the first week and as necessary from then on.

Wheel bearings are to be checked after the first 20 hours work and every 100 hours thereafter.

## OPERATING INSTRUCTIONS

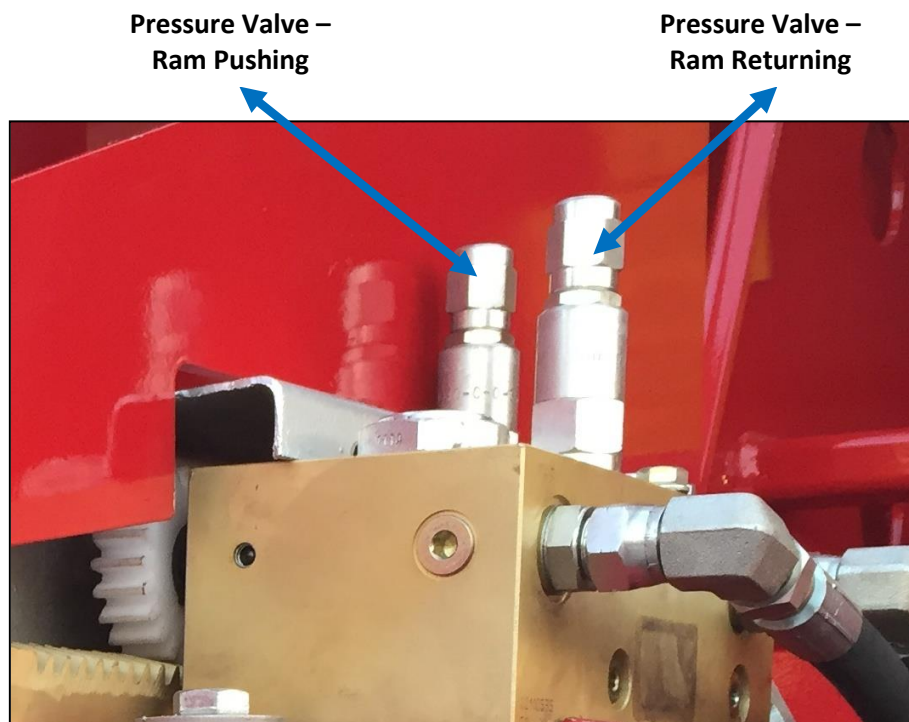
Always disengage PTO shaft when turning.

Engage and disengage PTO shaft at low engine revs.

1. Familiarise yourself with the controls and handle positions.
2. 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.
3. Select the correct main pushing door ram speed by following the instructions on page 8.

### **Door Pressure Adjust:**

The main gold coloured valve block has two silver coloured valves positioned on the top of it. These are pressure valves that control the pressure to the pushing ram. The valve positioned closest to the centre of the machine controls the pressure to the ram pushing out and the valve positioned closest to the side of the spreader controls the pressure to the ram returning. To increase the pressure, unscrew the cap on the chosen pressure valve and screw down the grub screw inside the valve, replace the cap and test. This must be adjusted when there is no oil pressure in the valves. Adjust the pressures slowly and test after each adjustment as these valves are designed to protect the spreader from damage.

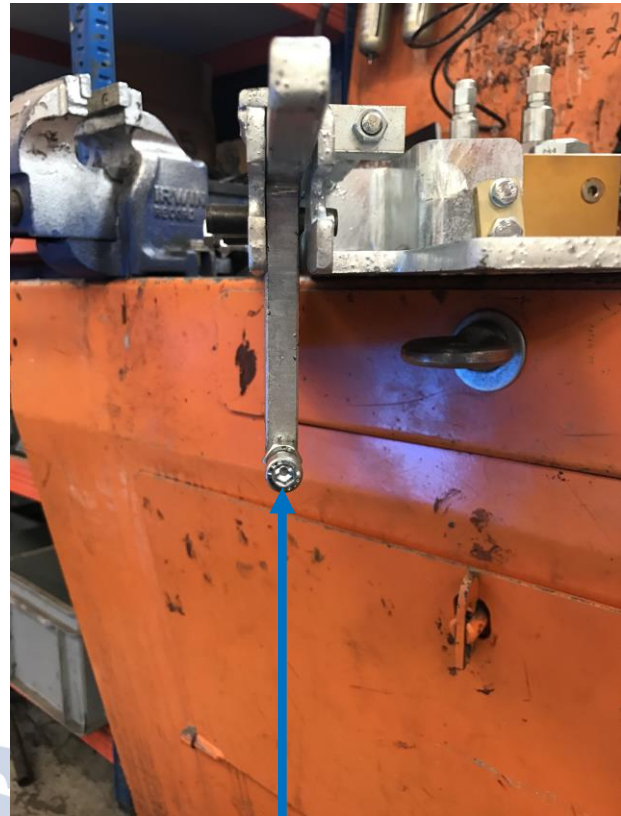


**Main Door Ram Speed Adjustment:**



**STAGE FOUR  
(8mm Bolt)**

**STAGE TWO  
(Turnbuckle)**



**STAGE THREE  
(8mm Cap  
Headed Screw)**

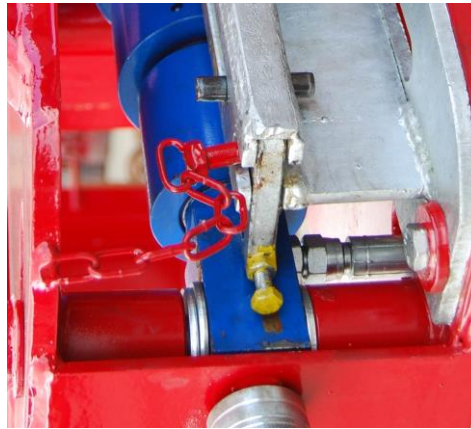
Allow the first stage of the ram to extend fully. To regulate speed on stage two, unlock locknuts on each end of turnbuckle (13mm Spanner Required x 2). Rotate turnbuckle with spanner, lengthen to slow ram down or shorten to speed ram up. Once the speed of stage two is correct tighten up the turnbuckle. Allow stage two to extend fully. To regulate speed of stage three locate the 8mm cap headed screw positioned below the main speed control mechanism. To increase the speed of the ram screw in the cap headed screw; to slow the ram slacken the cap headed screw (5mm Allan Key). Once speed of stage three is correct tighten up the locknut on the cap headed screw. Allow stage three to extend fully. To regulate speed of stage four locate the 8mm bolt positioned on top of the main speed control mechanism, beside the turnbuckle. To increase the speed of the ram screw out the bolt and to decrease the speed of the ram screw in the bolt; this is the opposite of stage three. Once the speed of stage four is correct tighten up the locknut on bolt.

When adjusting the different speed control bolts and cap headed screw carry this out slowly, with half turns at a time as the speed control mechanism is very sensitive.

**If in doubt about the operation of the speed control mechanism call before making adjustments – Charles J Marshall (Aberdeen) Ltd – 01224 722777**



The main door can be regulated either by hand or automatically, simply by removing the pin located on the patented slide situated alongside the main valve block. **See Photo.**



**Further Operating Instructions:**

1. The hydraulic main door at the rear 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. Start the main ram going backwards, controlling it by hand or automatically (as described above) thus allowing sufficient time for the machine to operate.
4. The spread of material can be controlled by forward ground speed or by increasing/decreasing the main door speed.
5. Once the load is discharged completely, start returning the main pushing door taking it away from the rear beaters.
6. Close the slurry door watch out for obstacles caught below the door (only after the main door is back).
7. Lower the tractor revs and switch off the PTO.

## 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. **See Photo.**

**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**

Part Number	Size	Maximum Weight	Speed	Max Tyre Pressure
<b>Please note this chart is for reference only each tyre brand can have different ratings.</b>				
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	2500kg	30km/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
083/01-401-60	405x60R 22.5	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	4500kg	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:	
Customer's Name:	
Address:	Post Code:
Model:	Serial Number:

<u>Check</u>	<u>Completed</u>
Check Tyre Pressure (See chart on page 11)	<input type="checkbox"/>
Tighten Wheel Nuts (18mm Stud Dia. = 270Nm / 22mm Stud Dia. = 475Nm)	<input type="checkbox"/>
Grease Hubs	<input type="checkbox"/>
Check External Wheel Bearing (Ensure No Side Movement on Wheels)	<input type="checkbox"/>
Check All Securing Bolts	<input type="checkbox"/>
Check Lights	<input type="checkbox"/>
Check For Damaged Paint and Touch Up If Necessary	<input type="checkbox"/>
Check Brake Rams (Extend and return freely)	<input type="checkbox"/>
Rams and Hydraulic Hoses Checked For Leaks	<input type="checkbox"/>
Check Rear Gearbox Oil Level Through Sight-glass	<input type="checkbox"/>
Grease the Door Guides for the Pushing Door	<input type="checkbox"/>
Grease the Speed Adjustment Slide on the Front of the Spreader	<input type="checkbox"/>
Grease Drive-line Bearings	<input type="checkbox"/>
Check Rear PTO Shaft Guard is Secured to Spreader	<input type="checkbox"/>
Ensure Relevant Paperwork Is Completed and Handed to the Operator	<input type="checkbox"/>

Signed: \_\_\_\_\_ Date: \_\_\_\_\_  
**General Overall Condition Satisfactory**

**To be returned when completed:**

Fax – 01224 724034      Email – [admin@marshall-trailers.co.uk](mailto:admin@marshall-trailers.co.uk)  
 Post – Charles J Marshall (Aberdeen) Ltd, Chapel Works, Bucksburn, Aberdeen, AB21 9TL.