

TRAILERS

OPERATING & SAFETY INSTRUCTIONS

For all spare parts please visit:

www.marshall-trailers.co.uk

For all trailer models please contact:

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

Telephone: 01224 722777

Email: admin@marshall-trailers.co.uk

Website: www.marshall-trailers.co.uk

































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				
Туре:	Marshall Trailer				
Model:					
Serial No:					
Conforms to the essential health & safety requirements of 98/37/EC as amended by 2006/42/EC directive.					
Place of Issue:	Chapel Works, Bucksburn, Aberdeen, AB21 9TL United Kingdom				
Name & Title of Authorised Person:	2115				
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.

- 1. Always ensure that no one is in the area of the chassis and body during tipping operations.

 DO NOT ENTER THE DANGER AREA FOR ANY REASON.
- 2. Always be prepared for the tail door to open rapidly upon release of the catches.
- 3. Never tip a loaded trailer beyond 21° unless the tail door is released, and the load is being dispersed.
- 4. Always apply the parking brake when the trailer is to be left unhitched from the tractor.
- 5. Silage sides must be fitted from an elevated position or by some mechanical means.
- 6. If fitting a bale extension, please be aware that the maximum load the extension can support is 500kg.
- 7. If using a retro-fitted rear tow hitch please be aware this is only designed for towing a second trailer empty. Please also note that the rear tow hitch is not designed as a towing-out point, designated rear towing-out points can be found on the back of the chassis members.

MAINTENANCE INSTRUCTIONS

- 1. Never tip the trailer body during maintenance, all maintenance can be carried out without the need to tip the trailer body. If a trailer body is tipped to work underneath it then a body prop must be used; the body prop is designed to prop an empty body only.
- 2. Check all hydraulic hoses for chaffing, signs of wear and perishing.
- 3. Tipping points shall wear, causing serious damage and posing an obvious safety problem. Pins should be removed and checked annually. Replace as necessary, not forgetting ram bolts.



- 4. Hubs / Bearings must be greased regularly; we recommend they are checked after the first fourteen days of work, then six monthly thereafter.
- U-bolts & spring-locating bolts should be checked every eight hours for the first week of operation and then monthly thereafter.
 Castle nuts should be checked after the first forty hours of work, then six monthly thereafter.
- 6. Tyre pressure should be checked regularly (See page 6).
- 7. Wheel nuts should be checked when the machine is new, then after operating for one hour, then one day and weekly thereafter. The same procedure applies if nuts have been removed and replaced (18mm stud diameter = 270Nm / 22mm stud diameter = 475Nm).
- 8. Check the tow hitch for wear and replace it accordingly.
- 9. Check all chassis securing points and strengtheners for signs of wear or cracking.
- 10. Lights should be kept clean and if not in use for some length of time, coating with some form of oil spray is recommended.
- 11. On tandem axle trailers, springs/rocker bushes should be greased every eight hours of use.
- 12. Tipping rams should have any exposed surfaces and the top of the stages coated in grease regularly to prevent corrosion of the rods.
- 13. If the trailer is not to be used, we recommend you remove the drain bolt at the front of the floor (monocoque-bodied trailers only).
- 14. Any repairs must be carried out by a qualified engineer or mechanic. If the repair requires the tipping of the trailer body, then a mechanical prop must be used.

BRAKE ADJUSTMENT

This can be done by loosening the nut behind the clevis, then rotating the piston, adjustment will appear from the ram. Remember to tighten the locknut when completed





SWINGING SILAGE ASSEMBLY INSTRUCTIONS

- 1. Remove the grain door.
- 2. Carefully lift both sides of the silage sides consecutively and place them in position on the sides of the trailer.

CAUTION

PANELS CANNOT BE LIFTED BY ONE PERSON, WE RECOMMEND A MECHANICAL LIFTING MACHINE

Always use a safe means to reach the panels and bolts – DO NOT climb on the trailer.

- 3. Fit the front mesh panel and bolt through the four holes but do not tighten.
- 4. Place side loading panels in the required position (eg. 1 on each side or 1 only). Ensure that you leave enough space to allow the gate tie bar to be placed between the panel and the upright end.
- 5. Place the tailgate into the slot with some form of the mechanical loader. Place the bolts through the side loading panel, gate and upright, using the washer to cover the adjusting slot.
- 6. With a long flat screwdriver, push the bottom corner of the silage gate from left to right, until it runs vertically with the trailer side, then tighten all bolts on the gate and front mesh.
- 7. Fit the bolts through the side of the trailer, securing the silage panels. The same procedure is used for the side loading panels.
- 8. Fit the channel bracket which holds the tailgate latch ram in place.
- 9. Thread through the 1/4" hydraulic hoses and T them into the union behind the rams.
- 10. Fit the hydraulic rams into the channel bracket and simply couple up the hydraulic hose.
- 11. Reverse the above procedure for removing silage sides.



HYDRAULIC SILAGE ASSEMBLY INSTRUCTIONS

- 1. Set the trailer set level and apply the handbrake before beginning the assembly process.
- 2. Remove plastic caps on corner posts and unscrew hydraulic door arm pivot bolt until flush with the inside of the trailer.
- 3. All lifting should be done with a mechanical lifting device.
- 4. Lift the NS main silage panel using the lifting points integrated into the side and guide the front silage panel post into the front corner post of the trailer. This must be done before positioning the rear silage panel tab into the rear corner post. When fitting this side ensure it is positioned as far towards the front of the trailer as possible.
- 5. Now repeat step 3 for the OS main silage panel.
- 6. Drill two holes through each side of the trailer and the silage side panels. Using the pre-drilled holes that have grey grommets in them to guide you. Then fit the securing bolts complete with washers from the silage side kit.
- 7. Then fit the large galvanized washer over each hydraulic door arm pivot bolt before refitting the nut and tightening.
- 8. Build up the hydraulic door arm panels and the rear door silage panel on the ground, joining the panels together using the bolts from the silage side kit. Do not tighten the bolts at this point, leave them slack to make fitting to the trailer easier.
- 9. Lift the panel assembly onto the rear of the trailer, lining up the side panels with the top of the hydraulic door arms as you lower them down into position.
- 10. Then securing the side panels to the hydraulic door arms using the bolts in the silage side kit. Tighten the bolts and secure the side panels against the top of the hydraulic door arms.
- 11. Now tighten the bolts that join the rear side panels to the rear door panel, these were the bolts we left slack earlier.
- 12. Lift the front mesh panel and position between the two side panels before bolting into place using the bolts from the silage side kit.
- 13. Finally, fit the ratchet straps to the front of the silage side panels and hook the other end into the bottom of the front corner post.

FOR SPARE PARTS GO TO:

www.marshall-trailers.co.uk



AIR BRAKE INSTRUCTIONS

- 1. To connect the air brakes plug the yellow and red suzis into the corresponding connectors on the tractor. Ensure the hydraulic braking system is left unplugged.
- 2. Trailers equipped with rocking beam suspension will have a manual load sensing system that adjusts the brake force via a handle mounted on the front upstand. There are three settings for the different braking forces; fully loaded, half-loaded or empty. This should be adjusted to match the corresponding trailer load.
- 3. Trailers equipped with spring suspension will have an automatic load sensing system that adjusts the braking force automatically depending on the trailer load.
 - a. The braking force range can be adjusted on the load sensing valve, which is located above the axles in the centre. The trailer should be unhitched and the handbrake applied before making and adjustments.
 - b. On the valve there is a load sensing lever with a brake force indicator next to it. Joined onto this lever is a threaded bar that joins the lever to the load sensing bar that runs between the axles.
 - c. To increase the braking force adjust the threaded bar to allow the lever to move higher; carry out the opposite to reduce the braking force.
- 4. The large black air tank must be drained regularly to prevent moisture from building up in the system; this is done by pulling the drain valve at the bottom of the tank.
- 5. Regularly check all pipes for kinks, damage or loose connections.



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	51 psi	
083-01-550-45	550-45 x 22.5	4375kg	40km/h	41 psi	
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	41 psi	
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 6) Tighten wheel nuts 18mm stud diameter = 270Nm & 22mm stud diameter = 475Nm Check U-bolt torque 19mm bolt diameter = 270Nm 22mm bolt diameter = 540Nm & 24mm bolt diameter = 600Nm Grease hubs Check external wheel pressure (Ensure no side movement on wheels) Grease tandem springs or oscillating rocker if fitted Check all securing bolts Check lights (If applicable) Check for damaged paint & touch up if necessary Check brake rams (Extend & return freely) Tail door fitted & adjusted correctly Rams & hydraulic hoses checked for leaks Ensure relevant paperwork is completed & handed to the operator

General overall condition satisfactory

Signed:

To be returned when completed:

Date:

Email: admin@marshall-trailers.co.uk
Post: Charles J Marshall (Aberdeen) Ltd
Chapel Works, Bucksburn, Aberdeen AB21 9TL.