

# USER HANDBOOK

#### IMPORTANT

If you sell your trailer, please pass this handbook onto the new owner



BRITAIN'S LEADING TRAILER MANUFACTURER



## HBE USER HANDBOOK

All HBE models are fitted with brakes and have a MGW (Maximum Gross Weight) of 1600kg & 2000kg.

Used correctly and maintained to this handbook, your trailer should give many years of safe and reliable service. If you are in doubt about any of the instructions, please contact your distributor or our Customer Care department.

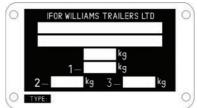
Please enter the following information for your own records:

Trailer Model	
Variant	
Serial Number	
Date of Purchase	
Maximum Gross Weight (MGW)	kg
Payload	
Unladen Weight	
Coupling Key No.	
Door Key No.	
Datatag Serial No.	
Drawbar Security No.	

## MANUFACTURER'S PLATE

The trailer is fitted with a Manufacturer's Plate on the right-hand side drawbar which will show the following information:

- The manufacturer's name
- The model number
- The trailer serial number
- Maximum Gross Weight for the trailer



## THE MANUAL

- Read this manual carefully before operating this trailer for the first time, ensure that all instructions are followed and any safety advice adhered to.
- Not following the instructions and advice can damage your trailer or injure yourself or others.
- Not following the instructions and advice can invalidate your guarantee.
- Ensure this manual is kept in a safe place and referred to when needed during the life of this trailer.
- The best place to store this manual is in a suitable location within the towing vehicle.
- The manual includes a section to record the service information and as such is an integral part of the product supplied to you.
- If you rent or sell the trailer, then pass on this and any other relevant documentation to the new owner/operator.
- As well as the instructions and safety advice in this manual, you must observe all national regulations that relate to driving a vehicle and trailer. If you are a commercial user then observe all laws, rules, licencing and regulatory requirements that pertain to your operational obligations.
- Be aware that all countries will be different, it is your responsibility to ensure that you comply with local laws and rules.
- For example, certain countries will require you to maintain your trailer and have a major periodic technical inspection.

## THE MANUFACTURER

#### Ifor Williams Trailers Ltd.

Reserves the right to make technical changes to the design, equipment and accessories with respect to the information and illustrations within this manual.

#### Obligations of the operator

The trailer may only be operated in a good/sound condition.

Ensure that this manual is included with the trailer, for example if it is sold.

Only suitably trained and/or qualified personnel should use, tow, maintain or service this trailer.

Ensure that this manual is complied with during all life cycle phases of the trailer.

Provide the requisite operating and auxiliary materials.

## **USER GROUP**

The trailer should only be operated by users who possess the following required skills, experience and knowledge:

• Experience in the handling and transportation of horses or other members of the equine family (henceforth "Horses" will be used for brevity)



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## **1.1 INTRODUCTION**

Please take the time to read the contents of this manual before you attach the trailer to the towing vehicle, or attempt to load it. It is a good idea when reading this manual, to take a tour of the trailer with all persons who will be using it.

Make sure everyone responsible is fully conversant with the procedures for attaching to the towing vehicle, towing, loading and maintaining the unit. By following, understanding and practising the information and procedures in this manual, the trailer will give you many miles/kilometres of safe travelling.

Certain information in this manual is governed by law and is subject to change without prior notice.

Great care has been taken to ensure that the information is correct at the time of publication. However, it is the trailer user's sole responsibility to ensure that they fully comply with all legal requirements.

We reserve the right to implement changes and improve specifications without prior notice.

Whilst every effort has been made to ensure the accuracy of these instructions, they are intended only as a guide to the user.

## **1.2 CUSTOMER CARE**

If you require any help or advice, please do not hesitate to contact our Customer Care team:

#### Email care@iwt.co.uk

#### Telephone **0843 216 7447**

Our business hours are 8:00am to 4:30pm GMT, Monday to Friday. (Please note that telephone calls to our customer care department may be recorded for quality & training purposes).

## 1.3 ACCOMPANYING LITERATURE

Various publications and appliance instruction manuals are supplied with your user handbook. These are to be read in conjunction with the user manual.

#### "Towing and the Law" –SMMT Booklet included with this handbook (UK & Ireland only)

Compiled by The Society of Motor Manufactures and Traders Ltd. There are wide-ranging rules and regulations to comply with when towing a trailer. This book covers subjects such as the suitability of a vehicle for towing a particular trailer and the necessity for correct maintenance of tyres and brakes. "Towing and the Law" has been designed to assist trailer users to ensure that they are complying with the law.

Please note that the information given in "Towing and the law" is subject to change without prior notice. Great care has been taken to ensure that the information is correct at the time of publication. However, it is the owner/user's sole responsibility to ensure that they fully comply with all legal requirements. Ifor Williams Trailers Ltd. will not accept liability for any inaccuracy or incorrectly stated legal requirements.

#### 'Towing Horse Trailers' by John Henderson

This book has been included with your trailer as it contains useful information on the safe transportation of horses. It is recommended that you carefully study its contents in detail prior to using your trailer.

## **1.4 SECURITY**

Your trailer is security marked, but as an added means of assisting the Police in making a positive identification we recommend that you mark the trailer with your postcode or another unique mark. Ifor Williams Trailers Horsebox trailers are also fitted with datatag electronic tags for use with police scanner systems (UK & NI only).

If you wish to protect your trailer with a coupling lock or other security device your distributor will be pleased to advise you of the various devices which are available.

The trailer is supplied with two keys, one for the coupling hitch and one for the inspection door.

## 1.5 WARRANTY

Your new Ifor Williams Trailer is warranted against defects in material and workmanship. The trailer is not designed to be water-tight.

For full terms & conditions refer to Ifor Williams Trailers web page: www.iwt.co.uk/ terms-conditions

## 1.5.1 WARRANTY CLAIMS

Warranty claims should first be directed to the distributor from whom you purchased the trailer, who will in many cases be able to rectify the fault quickly on their premises, or assist in presenting the problem to Ifor Williams Trailers for appraisal.

## 1.6 SAFETY

#### THE FOLLOWING POINTS ARE MOST IMPORTANT TO ENSURE SAFE USE OF THE TRAILER

• Ensure the trailer is serviced and maintained to the Manufacturer's recommendations.



- Always take care when entering and exiting the trailer.
- Never attempt to lift the tow hitch with your hands when hitching the trailer to the tow vehicle or at any other time. Always wind the jockey handle to raise and lower the hitch.
- Use an approved towing bracket and coupling ball/jaw on the towing vehicle.
- Always follow any recommendations for maximum trailer weights given in your towing vehicle's handbook.
- Never exceed the maximum gross weight shown on the trailer plate.
- Never exceed the recommended towing speeds.
- Check tyre pressures before every journey. Correct pressures are shown on the multifunction sticker located on the inspection door.
- Check wheel bolts after first 25 miles/40km of service and subsequently before every journey. (See section 9.2.3 Fitting Wheels, for wheel bolt tightening details).
- Check lighting equipment before every journey.

- Always make use of the breakaway cable.
- Always leave the handbrake on or chock the wheels when the trailer is parked. When parking the trailer for extended periods, it is advisable to chock the wheels and release the handbrake to avoid the possibility of the brake shoes adhering to the brake drum surface.
- With the trailer coupled to the towing vehicle, the floor of the horsebox should be level. See 3.5.2
- Never exceed the maximum nose weight.
- A nose weight that is too light can cause stability issues when towing.
- Except in emergencies, never unhitch a loaded trailer. If unavoidable, take great care to ensure that the jockey wheel is securely clamped and the handbrake is fully applied.
- If the trailer is on a slope, chock the wheels as an added precaution.
- Always tie down securely or restrain effectively all loads, if used to carry items other than horses, and carry out regular checks on the condition of the load during the journey.
- Ensure all ramps, doors, hatches, etc. are secure before towing the trailer.

If any additional equipment is to be fitted to the trailer that involves any welding, drilling or any structural modifications to the trailer, then this is done entirely at the owner's risk and may invalidate your warranty. Always seek professional advice and guidance from your coach builder/ bodywork specialist before undertaking any modifications.

## 1.6.1 USE

#### INTENDED USE

The following are permitted:

- Transport of domestic equine animals.
- Transport of horse accessories (e.g. saddles, blankets, cleaning utensils, etc.).

#### QUALIFICATION OF THE PERSONNEL

Ifor Williams Trailers Ltd. products may only be used and maintained by personnel who are familiar with:

- The contents of this manual.
- The trailer and associated towing vehicle.
- Any additional operating and maintenance instructions of accessories included with the HBE.
- The local legislation and laws pertaining to road use and licensing.
- All health and safety/accident prevention regulations as well as other relevant safety, occupational health and road traffic regulations.
- Knowledge about transporting domestic equine animals.
- Knowledge about the relevant Animal Welfare Legislation.

#### REASONABLY FORESEEABLE MISUSE

Any use extending beyond the prescribed transport applications is regarded as other than intended.

In particular, this includes:

#### GENERAL

- Non-observance of the safety instructions within this manual.
- Transport of persons.
- Transport of small animals (e.g. sheep, pigs,

etc.) - see local Animal Welfare Legislation

- Transport of foals or small horses without adaptation to the manufacturer's design to accommodate their smaller size.
- Driving with insufficient load securing.
- Driving with unsecured flaps/doors.
- Driving with the breast/breeching bars unsecured or not inserted.
- Irregular cleaning of the interior including the floor.
- Exceeding the drawbar load and/or trailer load.
- Transport of other loads without adequate load securing.
- Transport of unsecured goods within saddle compartment (if fitted).

#### THE MANUFACTURER: Ifor Williams Trailers Ltd.

Rejects any damage which arises through disregard of the contents of this manual – the risks are borne solely by the user.

#### DISCLAIMER

Any liability of the manufacturer becomes null and void if:

- The trailer and its components are altered without authorisation.
- The original parts or conversion parts/ accessories approved by Ifor Williams Trailers Ltd. are replaced by other components.
- Retrospective changes have been made to the trailer (e.g. new holes drilled in the frame or the reboring of existing drill holes in the frame). This is considered by Ifor Williams Trailers Ltd. to be a structural change and the type approval then becomes invalid.

- Non-approved accessories or third-party spare/component parts which are not original Ifor Williams Trailers Ltd. parts are attached or installed. The Type Approval of the trailer, becomes null and void.
- Care and maintenance intervals prescribed by the manufacturer are not complied with.

Any risks and liability exclusions resulting from this also exist if:

- Acceptance inspections have been carried out by inspectors/authorised experts of the technical inspection authorities or officially recognised organisations.
- Official approvals are available.

#### 1.6.2 CHECK BEFORE EVERY JOURNEY

#### SOURCES OF DANGER

Take note of the following points without fail:

- Coupling and uncoupling a trailer, do not place hands or feet where they can become trapped or crushed.
- Clearance heights on the route.
- Exceeding the maximum permissible gross weight, or one-sided overloading through incorrect loading.
- Poorly secured or unsecured goods and/or body components.
- Reversing Ensure that the area to the rear of the trailer is clear of all hazards.
- Excessive twisting whilst manoeuvring.
- Overloading of the trailer, axles & brakes.
- Fitting incorrect wheels and tyre sizes.
- Use of wheels with incorrect off-sets, onesided run-out or centrifugal imbalance.
- Overstressing as a result of reckless and inappropriate driving or handling.

- Impact and shock stress of the wheels/axles.
- Speed inappropriate for the road conditions and the loading status of the trailer, especially on sharp bends.
- The parked trailer can tilt or sink in on soft uneven ground.
- Driving on severe inclines.
- Loading/unloading the trailer in an area with a steep gradient.
- Failure to clean the horsebox floor after every use.
- Driving with opened but unsecured ramps, doors & hatches.

#### CHASSIS AREA

Note the following in general:

- Establish the electrical connections.
- Retract the jockey wheel and prop stands (if fitted) and lock them securely.
- Check the tyres and rims for damage.
- Check the tyre pressure, including the spare wheel.
- Check the tightening torque of the wheel nuts.
- In the case of a new trailer, re-tighten the wheel nuts after 25 miles/40km and before each journey.
- Secure the spare wheel, wheel chock and any other loose items.
- Check the number plate and signs.
- Check that the trailer coupling is in perfect condition.

#### **BODY AREA**

Close and secure all body components, such as:

- Ramps.
- Hatches.
- Doors.
- Load securing equipment.

- Fix any load.
- Ensure loads are balanced.

## 1.7 GLOSSARY OF TERMS

#### TRAILER

Your new Ifor Williams trailer.

#### GVW

Gross Vehicle Weight - Referring to the towing vehicle, this is the maximum allowable weight of the vehicle and its contents.

#### MGW

Maximum Gross Weight - Referring to the trailer, this is the Manufacturer's stated maximum for the trailer and its load, often governed by such items as coupling, tyres etc. although this may have been adjusted downward for one of a number of reasons.

#### MAM

Maximum Authorised Mass - A term used in driver licensing regulations, this has the same meaning as MGW detailed above.

#### UNLADEN WEIGHT

The weight of an empty trailer (usually as delivered before fitting of any optional accessories).

#### PAYLOAD

The amount you are allowed to carry, the payload and the unladen weight added together must never exceed the Maximum Gross Weight.

#### NOSE WEIGHT

The downward force exerted on the tow ball by the drawbar of the trailer.

#### **LEFT & RIGHT**

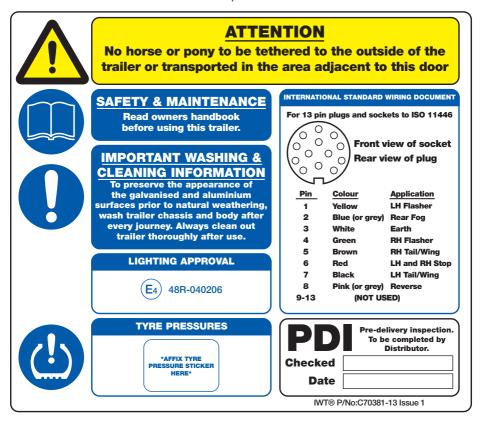
Are always referred to with regard to forward travel, i.e. viewed from on-board the trailer with the drawbar visible in front of you.

#### OUTFIT

The towing vehicle and trailer combined.

## **1.8 INFORMATION STICKERS**

This sticker is located on the inside of the inspection door.



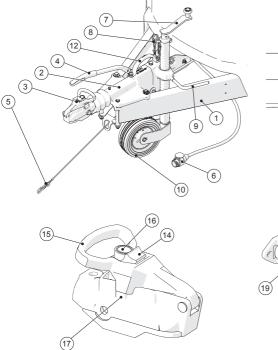
## 2 TOWING

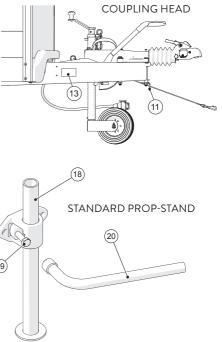
#### 2.1 UNDERSTANDING YOUR TRAILER

#### Coupling Drawbar & Jockey Wheel:

- 1. Drawbar
- 2. Overrun unit (Coupling body)
- 3. Coupling head
- 4. Handbrake lever
- 5. Breakaway cable & clip
- 6. Lighting cable & plug
- 7. Jockey wheel operating handle
- 8. Jockey wheel 'R' clip
- 9. Jockey wheel clamp handle
- 10. Jockey wheel

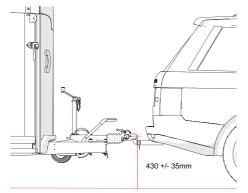
- 11. Breakaway cable guide
- 12. Manoeuvring handle
- 13. Manufacturers type plate
- 14. Release button
- 15. Operating handle
- 16. Lock & cover
- 17. Wear indicator tab
- 18. Prop-stand tube
- 19. Prop-stand clamp bolt
- 20. Wheel brace / prop-stand tool





## 2.1.1 RECOMMENDED TOW BALL HEIGHT

Ifor Williams Trailers recommends that the ball head on the towing vehicle is ideally adjustable and is within the range 395mm - 465mm. The horsebox is designed to comply with the EU whole vehicle type approval. This mandates that the centre of the ball head coupling on the trailer vehicle is 430 +/- 35mm (i.e. between 395mm and 465mm) when laden. Ensure that your towing vehicle ball height matches that of the coupling on the trailer to provide a level floor and a suitable noseweight imposed on the vehicle, see below.



HEIGHT OF THE BALL HEAD COUPLING

## 2.1.2 NOSE WEIGHT

Never exceed the maximum nose weight stated on either, the trailer, towing vehicle or tow bar. It is advisable to distribute the load to achieve a nose weight of between 75kg and 120kg.

A towing vehicle with a minimum nose weight capacity of 100kg is recommended for towing this trailer. Check the plated weights of the towing vehicle and tow bar before hitching up. The upper limit for the trailer coupling head is 150kg.

## 2.2 PRE-HITCHING UP CHECKS

#### Before hitching up always check the following:

- Check wheel bolts after first 25 miles/40km of service and subsequently before every journey. Torque to: 88Nm
- **2.** Check tyre pressures before every journey. 65p.s.i. (4.5bar).
- **3.** Inspect all wheels and tyres for signs of deterioration or damage.
- 4. Check the lighting equipment for damage.
- 5. Ensure all loose articles are stowed securely.

#### 3 HORSE BOX OPERATION



#### 3.1 ATTACHING/DETACHING THE TRAILER TO/FROM THE TOWING VEHICLE

- It is recommended that a minimum of 2 people work together when hitching up the trailer to the tow vehicle.
- When reversing ensure any pedestrians and your assistant are visible at all times.

#### **BREAKAWAY CABLE**

The breakaway cable is designed to operate the handbrake if the trailer becomes detached from the towing vehicle. It will then detach itself from the trailer by the spring opening out.

After use, the cable and spring ring should be replaced to ensure correct future operation.

## 3.1.1 COUPLING INSTRUCTIONS



Whenever possible, both trailer and towing vehicle should be on level ground.

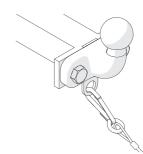
## 3.1.2 50MM BALL COUPLINGS



- 1. Check the condition of the breakaway cable. If frayed or kinked, replace before using trailer.
- 2. Check that the ball is clean, and the coupling head cup is well greased.
- **3.** Ensure that the trailer handbrake is fully applied.
- Disengage the jockey wheel R clip (if fitted).
- 5. Ensure that the jockey wheel clamp handle is tight and, by turning the jockey wheel jack handle, raise the coupling to a height greater than that of the coupling ball. Keep your feet well clear when lowering or raising the trailer.
- 6. Reverse the towing vehicle up to the trailer so that the coupling head is directly over the towing ball. Fully apply the towing vehicle handbrake and switch off the engine.

When reversing your vehicle towards the trailer use an assistant to direct you, take great care to avoid striking the coupling head which could cause damage to towing vehicle and trailer coupling.

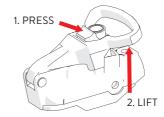
7. Attach the breakaway cable to the attachment eye or strong point of the towing bracket, either directly or to a dedicated loop or eye.



8. Check the breakaway cable cannot drag along the ground and cannot become taut during normal use.

If there is no breakaway cable fitted to your trailer, or if it or any other part of the coupling, draw tube or handbrake assembly appear to be damaged or missing parts -DO NOT TOW!

If your vehicle is fitted with a combination tow ball/jaw please read the section on attaching the trailer to the towing vehicle which relates to eye couplings for important safety information on breakaway cable attachment and tow-pin locking devices.



- 9. Remove the protective cap and unlock the coupling head (turn the key anti-clockwise). Always replace protective cap do not leave in lock.
- 10. Press the release button on the coupling head and lift the handle. Lower the coupling head by means of the jockey wheel jack handle until the coupling head is in place over the towing vehicle ball, and release the handle.

- **11.** Check the ball is fully engaged into the coupling body.
- 12. Check the release button has clicked back into place.
- **13.** Test that the ball is engaged by attempting to lift the coupling off the ball with the jockey wheel.
- 14. Retract the jockey wheel until it is fully wound up.
- **15.** Hold the top of the jockey wheel assembly and release the clamp.
- 16. Line up the anti-rotation pin on the jockey forks with the notch on the stem and wind the wheel further up so it can no longer rotate refer to diagram on page 18.
- 17. Taking care lift the jockey assembly fully up, positioned well clear of the brake linkage and inside the drawbar channel with the wheel trailing rearwards.
- Clamp the jockey wheel in place and engage the jockey wheel R clip (if fitted).
- 19. Attach the electrical plug to the towing vehicle's socket ensuring there is enough slack in the cable for the trailer to correctly negotiate tight turns, without the cable dragging on the road. Check that all the lights are operating correctly (Assistant required).
- 20. Release the trailer handbrake.

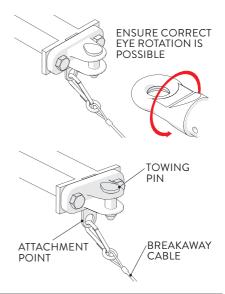
## 3.1.3 EYE COUPLINGS

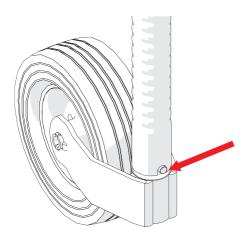
- 1. Check the condition of the breakaway cable. If frayed or kinked, replace before using trailer.
- 2. Check the towing eye can rotate.

- 3. Clean the towing eye and jaw and apply grease to the pin and eye.
- 4. Ensure that the trailer handbrake is fully applied.
- 5. Disengage the jockey wheel R clip.
- 6. Ensure that the jockey wheel clamp handle is tight and, by turning the jockey wheel jack handle, raise the coupling eye to the height of the towing jaw opening.
- 7. Remove the safety clip or release the safety catch on the towing jaw and remove the pin.\*
- 8. Reverse the towing vehicle up to the trailer so that the coupling eye is in position between the towing jaw. Fully apply the towing vehicle handbrake and switch its engine off.

When reversing your vehicle towards the trailer use an assistant to direct you, take great care to avoid striking the coupling eye which could cause damage to towing vehicle and trailer coupling.

9. Replace the pin and safety clip.\*





- 10. Attach the breakaway cable to the towing vehicle. The practice of wrapping the cable around the towing pin is not recommended. It is better to fit a suitable eye bracket to the towing bracket for the purpose.
- **11.** Check the breakaway cable cannot drag along the ground and cannot become taut during normal use.

**DO NOT** attach the breakaway cable to the towing pin or anywhere that it may interfere with the free movement of the eye within the jaw or come into contact with the pin locking device.

If there is no breakaway cable fitted to your trailer, or if it or any other part of the coupling, draw tube or handbrake assembly appear to be damaged or missing parts -DO NOT TOW!

- Retract the jockey wheel until it is fully wound up.
- **13.** Hold the top of the jockey wheel assembly and release the clamp.
- 14. Line up the anti-rotation pin on the jockey forks with the notch on the stem and wind the wheel further up so it can no longer rotate.

- **15.** Taking care lift the jockey assembly fully up, positioned well clear of the brake linkage and inside the drawbar channel with the wheel trailing rearwards.
- **16.** Clamp the jockey wheel in place and engage the jockey wheel R clip.
- 17. Attach the electrical plug to the towing vehicle's socket ensuring there is enough slack in the cable for the trailer to correctly negotiate tight turns, without the cable dragging on the road. Check that all the lights are operating correctly.
- 18. Release the trailer handbrake.

\*NOTE: Safety devices on towing jaws vary depending upon the manufacturer. The manufacturer's instructions should be followed to ensure correct operation.

## 3.2 MIRRORS



You are required to be able to see the rear corners of the trailer in your rear-view mirrors. If you cannot, use add on mirror extensions.

## 3.3 FINAL CHECKS BEFORE MOVING OFF

Check that you are displaying the correct registration plate for the towing vehicle you are using.

Any load should be securely tied or if animals are being carried check they are safe and secure.

If rear prop stands are fitted check that they are raised and that any doors or ramps are correctly closed. Finally release the trailer handbrake and you are ready to move off.

#### PASSENGERS

Passengers are forbidden to ride in a trailer at any time.

## 3.4 REVERSING

All trailers are fitted with auto-reverse braking systems. Manual reverse catches are available as optional extras for use in particularly adverse conditions, e.g. reversing up a slippery incline, where the slight drag present in the auto-reverse brakes may otherwise cause the wheels to lock.

# 3.5 DETACHING THE TRAILER AND PARKING

#### 3.5.1 DETACHING THE TRAILER EXCEPT IN AN EMERGENCY, YOU SHOULD NEVER UNHITCH A LADEN TRAILER!



If you have reversed the trailer into a parking position, pull forward a small amount so that the trailer brakes come out of auto-reverse mode, apply the towing vehicle and then the trailer handbrake.

- 1. Return to the towing vehicle, release the (towing vehicle's) handbrake and allow the towing vehicle to move forward slightly this allows the compressed draw tube to re-extend to its normal position, otherwise uncoupling will be difficult.
- **2.** Re-apply the towing vehicle handbrake and switch its engine off.
- 3. Check once again that the trailer handbrake is fully applied, especially if the trailer was reversed to its parking position as there may still be some 'slack' in the braking system.
- 4. Detach the trailer's lighting cable from the towing vehicle's socket and attach it to the parking socket provided on the trailer coupling.
- 5. Release the jockey wheel clamp, lower the

jockey wheel to the ground and securely tighten the clamp.

- 6. Disengage the R clip (if fitted) and turn the jockey wheel operating handle anticlockwise until it just begins to take the weight of the drawbar.
- 7. Release the coupling head as described under 3.1 coupling Instructions, continue turning the jockey wheel until the coupling head is raised clear of the ball. (For eye couplings, remove the pin from the towing jaw following the towing jaw manufactures instructions.)
- 8. Finally disconnect the breakaway cable from its attachment point. Don't forget to re-fit your tow ball cover to keep the ball in good condition and protected from the effects of the weather.

#### IMPORTANT – Never detach the breakaway cable before uncoupling the trailer.



If the trailer is to be parked for a long period of time it is advisable that the wheels are chocked and the handbrake released, this minimises the possibility of brake linings sticking to the drums.

## 3.5.2 PARKING THE TRAILER

Before detaching the trailer from the towing vehicle, you should choose the area where the trailer is to remain with care. Ideally the trailer should be parked on firm level ground to safeguard against the trailer rolling or sinking into the ground. Where you have no option but to park on soft ground, the trailer should rest on suitable scaffold type boards. Always apply the handbrake when the trailer is parked independently of the towing vehicle and chock the wheels on sloping ground. Release the handbrake when parked for extended periods.

## 3.6 DRIVING

#### 3.6.1 DRIVING LICENCE

Ensure you have suitable licence entitlements for the vehicle/trailer combination.

## 3.6.2 TOWING SPEED

Always comply with the driving speed regulations that apply in the country in which you are towing. Ifor Williams Trailers recommends that when towing horses, you restrict your speed to 55mph/85km even if local regulations permit towing at a higher speed.

**NOTE:** The 60mph limit is allowed on motorways and unrestricted dual carriageways only. On other unrestricted roads the limit is 50mph. If your vehicle & trailer combination is over 7500kg combined MAM speeds are further restricted to 50mph on dual carriageways and 40mph on other roads.

## 3.6.3 STABILITY

All our trailer models are of a well-balanced design and should be exceptionally good towers.

All Ifor Williams Trailers are designed and thoroughly tested to ensure safe and stable towing. If poor stability when towing is experienced, then possible causes include:

- 1. Worn springs or loose suspension fixings on the towing vehicle.
- 2. Towing vehicle springs too soft.
- 3. Insufficient nose weight.
- Nose of the trailer either too high or too low, due to incorrect height of the tow ball.
- **5.** Insufficient tyre pressures, towing vehicle and trailer.
- 6. Unsuitable towing vehicle.

## 3.6.4 SNAKING

This is a term used to denote an unstable towing vehicle and trailer combination where the trailer 'weaves' from side to side often causing a similar swaying movement in the towing vehicle itself.

#### CAUSES:

- 1. Insufficient nose weight.
- 2. Incorrect vehicle tow ball height.
- 3. Incorrect loading or weight distribution.
- **4.** Insufficient tyre pressures, tow vehicle and trailer.
- 5. Excessive speed, especially downhill.
- 6. Erratic driving.
- 7. Being overtaken by a large fast-moving vehicle.
- 8. Overtaking.
- 9. Side winds.
- 10. Unsuitable or unbalanced trailer.

#### ON THE ROAD



If you do find your outfit snaking, try to keep the steering wheel in a central position as far as possible, decelerate and avoid braking if possible.

## 3.6.5 STABILISERS



A stabiliser should never be used to try to improve a trailer/towing vehicle combination that has poor stability as instability may occur at higher speed.

However, a good stabiliser can make an acceptable trailer/towing vehicle combination more comfortable and easier to handle.

#### 4 OPERATION OF RAMPS AND DOORS

#### 4.1 REAR RAMP OPERATION



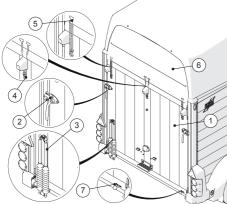
**DANGER.** To avoid the possibility of being injured in the event that

the ramp drops down, always stand to the side of the ramp when operating the latches and when lowering or raising the ramp. The rear ramp may be subjected to a fallen horse against it or to kicking from any horse onboard.

## 4.1.1 UNDERSTANDING YOUR REAR RAMP

Your rear ramp also can operate as a side hinging door.





- 1. Ramp.
- 2. Ramp handle/latch.
- 3. Gas Springs.
- 4. Roller blind rubber strap.
- 5. Middle roller blind rubber strap.
- 6. Roller blind.
- 7. Side hinging release bolt.

The weight of the ramp is gas spring counterbalanced to help reduce the effort required to raise and lower the ramp. Note the counterbalance force is not constant, so the weight of the ramp will change as it is raised or lowered.

## 4.1.2 OPENING THE REAR RAMP

- **1.** Position the trailer on firm level ground and apply the vehicle and trailer handbrake.
- 2. Lower the rear prop stands if fitted.

**Caution.** If the trailer is facing up hill, nose up, when opening the rear ramp, the ramp may start to drop as soon as the catches are released.

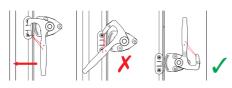
- **3.** Before opening the ramp look inside for anything leaning against the ramp and remove if possible.
- **4.** Check that the side hinging release bolt is fully engaged (item 6 lower right-hand side).
- 5. Open top roller blind.
- i. Pull down the rubber straps to release.
- ii. The roller blind will wind itself upwards.
- 6. Unlatch each side of the ramp in turn as follows:
- For each Ramp handle/latch, move the safety spring so that the handle can rotate





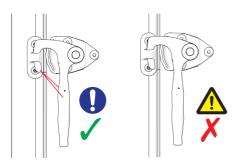
and move the handle towards the outside of the trailer a full 180 degrees so that the handle is pointing directly upwards as per the image overleaf, thus unlatching the ramp.

- ii. Keeping a firm hold and standing to one side of the ramp, pull the handle to open the ramp.
- 7. Continuing to stand to the side of the ramp, lower the ramp down slowly.



## 4.1.3 CLOSING THE RAMP

- 1. Check that nothing is protruding to block ramp closing.
- Standing to the side of the ramp, lift and close the ramp. Try to avoid slamming the ramp as this may disturb your horses.
- **3.** Latch each side of the ramp in turn reversing the opening procedure.
- 4. If the spring shown in the image below isn't present or appears damaged, then do not tow the trailer until it has been replaced.
- 5. Raise the prop stands if fitted.

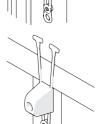


## 4.1.4 OPENING THE REAR RAMP AS A SIDE HINGING DOOR

**CAUTION.** If the trailer is facing up hill, nose up, when opening the rear ramp door, the ramp door may start to swing open as soon as the catches and bolt are released.

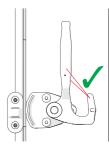


- **1.** Position the trailer on firm level ground and apply the vehicle and trailer handbrake.
- 2. Lower the rear prop stands if fitted.
- **3.** Before opening the ramp door look inside for anything leaning against the ramp and remove if possible.
- 4. Open top roller blind:
- i. Pull down the rubber straps to release.
- ii. The roller blind will wind itself upwards.
- 5. Unlatch one side of the ramp only as follows:
- i. For the Ramp handle/ latch on the side of the side hinging release bolt, move the safety spring so that the handle can



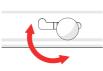
rotate and move the handle towards the





outside of the trailer a full 180 degrees so that the handle is pointing directly upwards as per the image on page 22, thus unlatching the ramp.

ii. Pull the side hinging release bolt to release the door and pull it up into the notch (this notch will not



hold the bolt in place, it is there to help ergonomically).

iii. Swing open the rear door.

#### 4.2 UNDERSTANDING THE INSPECTION DOOR

The inspection door is a lockable door that can be locked with a key from the outside and locked or unlocked from inside the trailer.

#### LEFT HAND DOOR LOCK

1. Inner lock turn handle to this position to open.

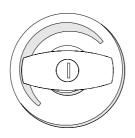


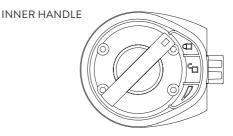
2. Inner lock turn handle to this position to Unlock but not to open.



- **3.** Inner lock turn handle to this position to Lock.
- 4. Rotary handle.

#### OUTER HANDLE





# 4.2.1 OPERATING THE INSPECTION DOOR

- 1. From the outside, insert key and turn clockwise to lock and anti-clockwise to unlock.
- 2. Once unlocked from the outside, turn the handle anti-clockwise to open the door.
- **3.** Open door fully until it engages with the door keep.
- **4.** To close from the outside, pull door away from the door keep by pulling sharply at the bottom of the door.
- **5.** Ensure the inner turn handle isn't set to the lock position and push the door closed. Try to avoid slamming the door, especially when a horse is present.
- 6. From the inside, turn the rotary handle clock-wise so the handle points to the arrow.
- 7. To close from the inside, pull the inner handle towards you ensuring your fingers are clear of the door and pull firmly.
- **8.** Lock the door from the inside, by turning the rotary handle anti-clockwise to the closed padlock symbol.

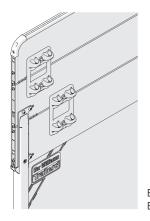
## 5 STALLS

The HBE uses a single longitudinal partition mounted on two "legs". It is fixed into place with the breast bars. The partition can be easily moved and removed with the help of an assistant.

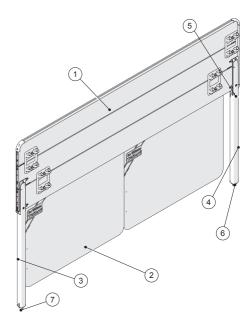
**NOTE.** It is illegal to carry two or more horses in an un-partitioned trailer.

## 5.1 UNDERSTANDING YOUR STALLS

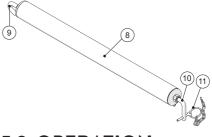
- 1. Partition leaf.
- 2. Partition skirts.
- 3. Front "leg".
- 4. Rear "leg".
- 5. Rear "leg" locking knob.
- 6. Rear "leg" keyed fitting.
- 7. Front "leg" keyed fitting.
- 8. Breast/Breeching bar.
- 9. Hook end fitting.
- 10. Pin end fitting.
- 11. Linch pin & chain.



BREAST BAR BRACKETS



#### BREECHING/BREAST BAR



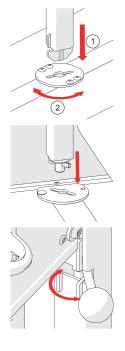
## 5.2 OPERATION

#### **5.2.1 INSTALLING THE PARTITION**

- **1.** With the aid of an assistant, lift the partition into position above the front keyed slot.
- 2. Ensure the angle of the front leg "key" lines up with the keyed slot in the floor and lower the leg into the slot.
- **3.** Rotate the partition so that the rear leg is above the slot in the floor, ensuring that the "key" at the bottom of the leg aligns with the slot in the floor.

Lower the rear leg down into the slot in the floor and rotate the "rear leg locking knob" to lock the partition into place.

**4.** Fit the breast/breeching bars to the partition by attaching the hook ends to the partition and then the pin ends to the walls, securing in place with the provided linch pins. (See section 5.2.2)



#### 5.2.2 SECURING THE STALL

- 1. Hook the breast/breeching bar on to the partition breast/breeching bar brackets.
- Lift up the pin end over the wall mounted breast/breeching bar bracket.
- **3.** Insert breast/breeching bar pin end into wall mounted bracket, ensuring that the breast/breeching bar is level and at right angles to the wall and partition.
- Insert linch pin through the hole in breast/ breeching bar pin end.
- 5. Repeat for the other side.

## 5.2.3 REMOVING THE STALL

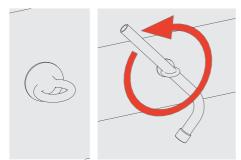
The partition can only be removed when the breast/breeching bars have been removed.

Removal is the reverse of the installation procedure explained in Section 5.2.1.

- **1.** Remove the breast/breeching bars (reversal of procedure explained in 5.2.2).
- 2. Rotate the "rear leg locking knob" to unlock the partition.
- **3.** Rotate the partition to allow the front leg to be removed from the keyed slot.
- **4.** With the aid of an assistant lift the partition out of the front keyed slot.

## 5.3 IN THE EVENT OF A HORSE BECOMING STUCK

The breast/breeching bars can be removed from outside the trailer by removing the retaining bracket eye-bolts, first the lower one and then if necessary the top one. These eye-bolts can be undone by hand, or by using the supplied Ifor Williams wheel brace. Pull the eye-bolt towards you as you rotate it anticlockwise to release it. To use the wheel brace simply pass the handle through the eye bolt and turn (see diagram below). Being able to release the breast/breeching bars from outside of the trailer allows a distressed horse to be unloaded without endangering yourself by trying to unhook the breast bars from inside.



Periodically check that the breast/breeching bar release fasteners turn freely.

#### 5.4 INSPECTION/ GROOMS DOOR

The inspection door is to allow access to the horses without opening the ramp. It should be kept closed when not in use and whenever the trailer is being moved.

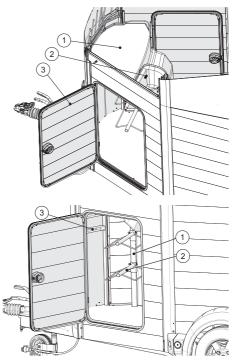
Never leave the door open if you intend leaving a horse unattended, as the horse may attempt to exit the trailer though the open door and cause injury to itself.

## 5.5 TACK COMPARTMENT (IF FITTED)

Certain models of HBE will have a fitted saddle compartment in the front of the trailer.

#### 5.5.1 UNDERSTANDING YOUR TACK COMPARTMENT

- 1. Saddle compartment.
- 2. Feed bucket (optional).
- 3. Compartment door.



- 1. Saddle rack post.
- 2. Saddle support.
- 3. Shelf.

#### 5.5.2 ADJUSTING YOUR SADDLE RACK

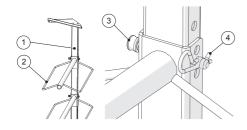
Your saddle rack (2) can be raised or lowered using the holes in the saddle rack post (1).



To adjust, support the weight of the saddle rack (2), pull R-clip (4) from pin (3).

Pull pin (3) completely out of post (1) and move saddle rack (2) to the desired position.

Insert pin (3) and secure in place with R-clip (4).



#### 5.6 FLOORS

At regular intervals the rubber mats should be removed and inspection made of the floor area for any kicking damage. As a guide, we recommend a monthly check where the trailer is in daily use.

## 5.7 STRAW BEDDING

Straw or similar bedding should be used in your horsebox to minimise urine leakage, and to improve comfort and footing, especially when the floor is wet.

## 5.8 STABLING HORSES

This trailer is for transporting horses and ponies only and the time they are in the trailer should be kept to a minimum.

Do not use the trailer to stable horses.

## 5.9 INTERIOR LIGHT

The interior light inside the trailer is powered from the vehicle side lights and therefore will only work when you have your towing vehicle side lights on. Remember to switch off when not in use.

Do not obstruct the interior lamp with hay nets, clothing, etc. (The lamp will overheat and may become a fire risk).

## 5.10 ROOF VENT

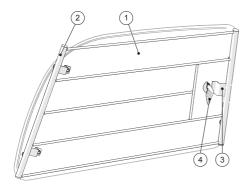
Operate the roof vent by pushing up or pulling down on the hook. It is hinged at the front and can be used when stationary or whilst travelling to provide cooling and ventilation for your horse. Be mindful of the increase in trailer height if travelling with it open and also of water ingress during wet conditions.

#### 5.11 SIDE WINDOW/TOP DOOR

The side windows are windows that can be opened from the rear.

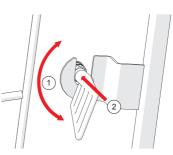
#### 5.11.1 UNDERSTANDING YOUR FRONT SIDE WINDOW

- 1. Acrylicw window.
- 2. Window guard.
- 3. Window handle catch.
- 4. Window handle latch.



#### 5.11.2 OPERATING YOUR FRONT SIDE WINDOW

- **1.** To open the window, rotate the handle latch so that the main body of the latch clears the catch.
- Push window open to the desired position and line up the catch hook to the closest slot in the latch body.
- **3.** Rotate the latch body so that the slot goes over the catch hook fully.
- **4.** To close, reverse the above procedure and finish by rotating the latch body so that it holds the window in the closed position against the catch hook.



#### 6 LOADING AND UNLOADING



For clear guidance on preparing and controlling your horse, make sure you read and understand the relevant pages in 'Towing Horse Trailers' supplied with this manual (UK & NI). The horses should wear appropriate protective clothing including: head collars, bandaged leg padding and a tail guard or bandage. Be prepared before you start, have an assistant with you and ensure everyone wears the appropriate safety wear.

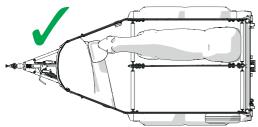
Ensure you have read and understood the above instructions on the use of the trailer ramps, partitions, etc. and practiced the use of them before doing any loading.

The trailer is designed for the horse to be transported facing forwards.



## 6.1 LOADING

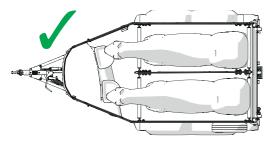
The trailer must be attached to the towing vehicle. Position the trailer on firm level ground and apply both vehicle and trailer parking brakes. If fitted, deploy the rear prop stands. If for any reason you have to load or unload with the trailer detached, you must make sure that the jockey wheel is securely clamped and the handbrake is fully applied before proceeding.



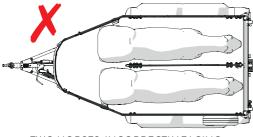
SINGLE HORSE, FACING FORWARDS, TRAVELLING ON SIDE FURTHEST FROM ROAD-SIDE (RIGHT HAND DRIVE COUNTRIES PORTRAYED IN IMAGE)



SINGLE HORSE, FACING FORWARD BUT INCORRECTLY POSITIONED ON THE SIDE CLOSEST TO THE ROAD-SIDE



TWO HORSES, FACING FORWARDS WITH CENTRAL PARTITION



TWO HORSES, INCORRECTLY FACING REARWARDS

Always employ the assistance of a second person with experience of loading horses into trailers. Horses are large unpredictable animals, never put yourself into a dangerous position when handling a horse.

Open the rear roller shutter and the rear ramp, refer to section 4.1. Ensure the partition is correctly positioned, with both breast bars secured in position at the front of the stalls, refer to section 5.5.2. The rear breeching bar in the stall in which the horse isn't being loaded must also be correctly fitted and secured, refer to section 5.2.2. Ensure the rear breeching bar for the stall being used is ready to hand for when the horse is loaded.

For ventilation open the windows and roof vent as required, as this will be more difficult once the horses are loaded.

Lead the horse slowly into the trailer, then once loaded, the horse should be tied up to one of the tie rings provided, ensuring that sufficient slack remains for the horse to stand in its natural position and move around within the stall. Exit through the front inspection door, close it behind you and move to the rear of the trailer and secure the rear breeching bar

into position.

## Always use the appropriate breeching bars and partitions.

Close the rear ramp. Raise the prop stands if used.

## 6.2 UNLOADING VIA THE REAR RAMP

Open the rear top doors and the rear ramp, refer to section 4.1.

Unhook and remove the rear breeching bar behind the horse to be unloaded. Move to the front of the trailer and enter via the inspection/groom's door, closing the door behind you. Untie the horse from the tie ring and carefully back the horse from the trailer. Replace breeching bar before off loading 2nd horse. Repeat to unload second horse.

Clean out the horsebox before closing it back up.

#### 7 GENERAL HYGIENE/ SAFETY

General hygiene is extremely important to protect against contracting infections from animal waste. After each journey thoroughly clean and disinfect the trailer and always wash your hands thoroughly after using the trailer.

It should be noted that some disinfectants are highly corrosive and could damage your trailer if used incorrectly, ideally a neutral pH disinfectant should be used. Always refer to the label or product data sheet when using any chemicals, and follow any safety advice given. If in doubt seek advice from the chemical manufacturer.

When cleaning is complete thoroughly rinse the trailer to remove any chemical residue.

#### 7.1 SAFETY PRECAUTIONS

#### 7.1.1 FIRST AID

In addition to the first aid kit for your car it is a good idea to carry one for the horses, plan for the worst situation and pack enough supplies for the maximum number of horses that can be carried.

#### 7.1.2 BREAKDOWNS WITH HORSES ON-BOARD

In the event of an accident or breakdown, always contact the emergency services and your breakdown recovery company. Never unload the horses on the road. It is illegal to do so on motorways in the UK and can lead to fatal accidents.

## 8 GENERAL MAINTENANCE

#### **8.1 EXTERIOR BODYWORK**

To maintain a showroom finish, one needs to hand wash regularly with a car or caravan shampoo, rinse with cold water and chamois leather off. A protective coating applied after cleaning like Fenwick's Bobby Dazzler will help to keep the trailer cleaner for longer and makes cleaning next time easier. It also contains an algae inhibitor.

- Do not use a high-pressure power washer on the vents, doors and windows.
- Under no circumstances use any abrasive agents, T-cut, methylated spirit, white spirit, other solvents or washing up liquid to the exterior of your trailer.

## 8.2 GALVANIZED FINISH

As part of the normal ageing process, galvanized surfaces form a dull patina. This protects the reactive zinc and underlying steel from further corrosion. The appearance of the surface ranges from bright silver to dull grey. Exposure to road salt can change the appearance of newly galvanized surfaces to grey or black with white or grey deposits. This does not affect the protective properties of the finish.

To slow the dulling from road salt exposure, wash the trailer after each journey.

#### 8.3 HIGH PRESSURE POWER WASHING

When using a high-pressure power wash on the body, only use it to rinse the surface prior to and after a hand wash. The jet nozzle should be placed no closer than 50cm from the body surface and at least 15 degrees from perpendicular to the surface. The nozzle should not be directed at the compartment and entrance door gaps as this would force water past the door seals and the nozzle should never be directed at the windows as it can scratch them. Do not direct onto wheel bearings or brakes.

## 8.4 ACRYLIC WINDOWS

#### **8.4.1 CLEANING THE WINDOWS**

With a little care your windows will remain clear and scratch-free.

- Use copious quantities of water to rinse dirt from your window.
- Use a chamois leather or soft dry cloth to dry your windows.

#### DON'TS:

- Do not use a sponge or dry cloth until the window has been rinsed with water.
- Under no circumstances use abrasive and corrosive substances such as: alcohol, turpentine, dry-cleaning naphtha, fly spray,

acetone, dishwasher detergents or solvents.

- Do not use a high-pressure power washer for cleaning your windows.
- Never drive your trailer through a carwash. The rotating brushes can cause scratches on the acrylic.

## 8.4.2 WINDOW MAINTENANCE

The windows should also be inspected during the annual service of your vehicle.

- Shallow scratches can be removed using the Polyplastic Acrylic Polish that is available from your dealer. (Item no. 09.00.880.00.00.01.000)
- For deeper scratches please refer to your dealer or an appropriately certified specialist.
- Use talcum powder or another approved maintenance agent to keep the rubber in optimum condition.
- Like all other materials acrylic is also susceptible to UV discolouration. Remember that there may be some colour difference when replacing a window.
- Hairline cracks in acrylic can only occur if your window comes into contact with a non-approved cleaning agent. This will make the guarantee void.

Do not use any agents containing silicones for maintaining the rubber.

## 8.5 HINGES & CATCHES

Lightly oil occasionally.

#### 9 MECHANICAL MAINTENANCE

These procedures must be carried out by competent persons. If you have any doubts about your ability to complete any of the procedures we recommend these tasks are performed by your local distributor.

## 9.1 TYRES

Tyres must be maintained at the pressure indicated on the multifunction sticker located on the inspection door. Underinflation will adversely affect handling and fuel consumption and will lead to premature wear. If seriously under-inflated, a tyre will overheat and fail very rapidly.

When renewing tyres, always ensure that you purchase a tyre of the same size and load/speed index rating. This will be found on the sidewall of the tyre. E.g. 165/60R13C 96/94N. Different makes or models of tyres of the same size can have widely differing load/speed index ratings and inflation pressures. Use of a tyre with a lower rating can be dangerous. If in doubt, ask a tyre distributor or our customer Care department.

#### DO NOT REPLACE WITH LOWER RATED TYRES

The maximum gross weight figure given on the trailer plate is always equal to or less than the approved maximum load for the tyres multiplied by the number of tyres on the trailer. In some cases, this includes a bonus load which is allowed for trailer use up to 60mph. Other maximum load figures are marked on some tyres. These do not apply to the UK or Europe and should be disregarded.

## 9.1.1 TYRE REPAIRS

Punctures should be inspected and repaired by a specialist tyre distributor. Do not fit tubes to tubeless tyres as this can lead to a "blow out" in the event of a further puncture. If the tyre is too severely damaged for a repair to be carried out the tyre should be replaced.

## 9.2 CHANGING A WHEEL

## **9.2.1 JACKING UP THE TRAILER** DON'TS:

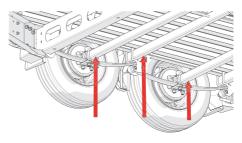
• Don't place the jack on the centre line of the trailer under axles or chassis cross members.



- Don't place the jack directly under the bodywork edges, mudguards, front/rear bumpers or the floor.
- Don't place the jack under the suspension springs.
- Don't place the jack under the drawbars.

## 9.2.2 JACKING POINTS

- 1. Outer ends of the axles beside the springs.
- **2.** Outer ends of the chassis cross members beside the chassis rails.



## 9.2.3 FITTING WHEELS

- Ensure wheel bolt threads and wheel seating surfaces are clean and dry.
- Place wheel over locating rim on the hub.
- Tighten each bolt slightly and then tighten to the torque figure given below, following the sequence shown in the diagram to the right.

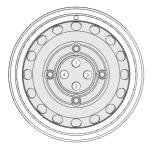
Bolt size: 4 x M12

Torque: 88Nm

Socket size: 19mm A/F

Wheel bolts should be checked after the first 25 miles/40 km of service and subsequently before every journey.





#### 9.2.4 SPARE WHEEL

The spare wheel is located on a bracket on the side of the trailer. This is of the same type as the wheel/tyres fitted to the trailer and is secured in place using two of the standard wheel bolts. These bolts should be fitted opposite to each other, e.g. Position 1&2 or 3&4.

## 9.3 BRAKES & COUPLING

Your trailer is fitted with Knott brakes and coupling. Supplied within the user manual pack is a Knott Maintenance & Servicing information leaflet which covers the following maintenance procedures:

- Replacing brake assembly complete.
- Replacing brake shoes.
- Brake adjustment.
- Replacing brake cable (Bowden cable).
- Replacing breakaway cable.
- Replacing coupling head & bellow.
- Replacing the coupling damper.

These procedures must be carried out by competent persons. If you have any doubts about your ability to complete any of the procedures we recommend these tasks are performed by your local distributor.



Brake drum removal and replacement requires the axle nut to be removed and refitted. A new axle end nut must be fitted every time it is removed and refitted. Tighten to a torque of 350Nm and lock into both sides of the stub axle groove as shown adjacent.



#### 9.3.1 BRAKE SERVICE INTERVALS

- Brake adjustment should be checked after the first 100 miles and subsequently every 1000 miles or 2 months (whichever is the sooner).
- Brake lining conditions should be checked every 3000 miles or 6 months (whichever is the sooner).

## This can be carried out as follows without removing the brake drum:

Remove the two plastic bungs from the rear of each brake and visually check the thickness of the lining, replacing the bungs after checking. If the thickness is less than 1.5mm the linings should be replaced.

- Brake cables. To ensure smooth operation of the brakes and to reduce the possibility of premature brake wear, it is recommended that the brake cables are replaced every 6000 miles or 12 months (whichever is the sooner) at the same time as the brakes are checked.
- Brake linkage. All moving parts should be greased or oiled monthly.

#### 9.3.2 COUPLING UNIT SERVICE INTERVALS

- The general condition of the overrun coupling unit should be checked monthly.
- To minimize wear on your towing ball and coupling head, clean out the cup in the coupling head monthly and apply new grease.

Service as follows every 3000 miles or 6 months, whichever is sooner:

- Thoroughly examine all moving parts for wear and correct functioning.
- Grease the drawtube bearings by means of the grease nipples.
- Clean and grease bearing parts and pivot pins.
- Ensure correct functioning of all pivot pins and levers and oil monthly.

## 9.3.3 DRAWTUBE REACTION TEST

Fully apply the handbrake lever. Push the coupling head as far back into the housing as possible. (It will move slowly under steady pressure.) On release, the coupling head should slide gradually forward under the pressure of the gas-filled shock absorber. If it either fails to return to the forward position or returns immediately, contact your authorized distributor for advice.

#### 9.3.4 CHECKING THE COUPLING HEAD FOR EXCESSIVE WEAR

With the coupling disconnected from the tow ball, observe the position of the wear indicator lug relative to the "MAX" line. Then, with the coupling attached to the tow ball, re-check the



position of the lug (see diagram). The gap between the base of the lug and the "MAX" line should be greater. If it is unchanged, excessive wear has taken place on the coupling head, the coupling ball, or both.

If this is the case, make a further check using a new 50mm ball.

If the gap is still unchanged the coupling head is excessively worn and should be replaced. However, if the gap is greater, your original 50mm ball should be replaced.

**NOTE:** If you need to replace your coupling head, carry out the check once more, as your tow ball may also need to be replaced. It is recommended that the coupling head and ball are replaced at the same time, as this will extend the service life of both components.

## 9.4 JOCKEY WHEEL

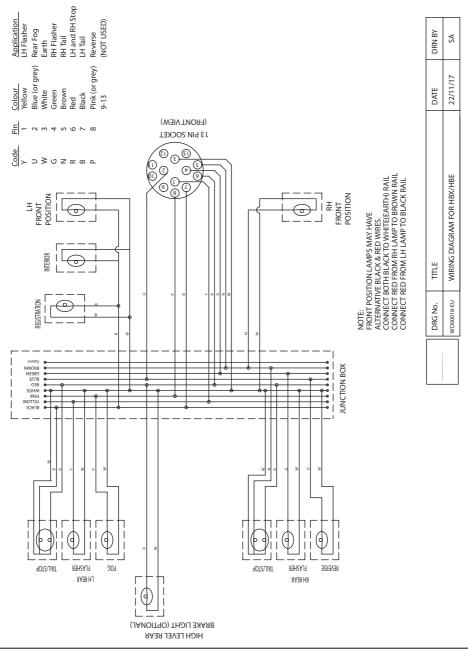
The jockey wheel should be checked monthly. Any damaged or worn parts should be replaced immediately. Lubricate the wheel spindle and screw thread every 6 months.

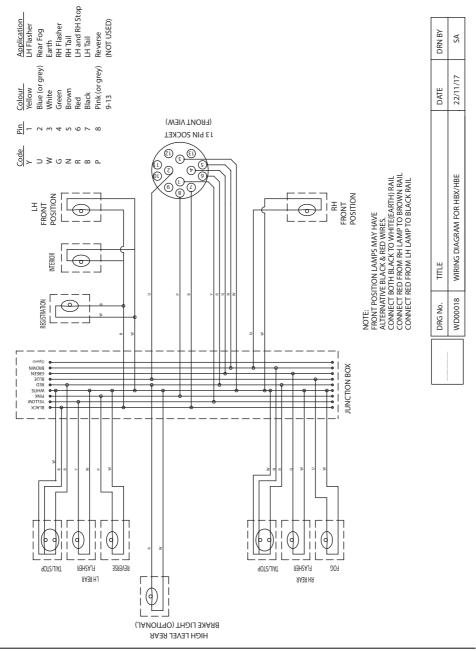
#### 9.5 PARABOLIC LEAF SPRINGS

Check the tightness of the self-locking nuts on the U bolts every 1000 miles or 2 months. Or at every brake service check, whichever is sooner. Tightening torque: 140 Nm.

#### **10 ELECTRICAL DIAGRAMS**

#### **10.1 TRAILER LIGHTING DIAGRAM – LH DRIVE COUNTRIES**





#### **10.2 TRAILER LIGHTING DIAGRAM – RH DRIVE COUNTRIES**

#### **11 SERVICE INTERVALS**

#### **100-MILE INSPECTION**

#### WORKSHOP STAMP

DATE

SIGNATURE

#### **1000-MILE INSPECTION**

WORKSHOP STAMP

DATE

SIGNATURE

NOTES

#### **2000-MILE INSPECTION**

#### WORKSHOP STAMP

DATE

SIGNATURE

#### **3000-MILE INSPECTION**

WORKSHOP STAMP

DATE

SIGNATURE

NOTES



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