



The information contained in this leaflet is given for your guidance in using Bramber Boat Trailers. Please read it carefully.

Bramber Boat Trailers are designed and tested to carry the loads specified, and care should be taken not to overload and, as far as possible, to maintain an even distribution of the load whilst towing.

Boat manufacturers often publish only the dry weight of their boats or craft, and as it is necessary to carry sails, engines, tackle, personal gear etc. it is important to include these items in the all up weight, before specifying the trailer you purchase.

Adjustment of Load Distribution: Loosen all the clamp bolts on the axle beam, and tie bars where fitted, and move the axle position to give an approximate nose weight as follows:—

Weight of Boat to be Carried
Up to 1100 lbs.
Over 1100 lbs.

Nose Weight Recommended 35 lbs. 50 lbs.

## AFTER ADJUSTMENT RETIGHTEN ALL BOLTS SECURELY

Maintain the nose weight recommended after loading, by arranging moveable gear to the front or rear as necessary.

<u>Couplings</u>: The couplings fitted to all Bramber Boat Trailers fit a standard I.S.O. 50mm diameter ball. The recommended height of the centre of the ball from the ground, with the towing vehicle laden is 13.8" to 16.5" (350 to 420mm). A combination of 50mm ball and 2" socket is unsafe.

Towing Brackets: We recommend that specialists supply and fit these to towing vehicles.

**Towing Balls:** Are drilled at  $3\frac{1}{2}$  centres for  $\frac{7}{8}$  diameter high tensile bolts.

Lighting Circuits: Our standard lighting arrangements are in conformity with I.S.O. recommendations and use 7 pin plugs and sockets, wired as in Fig. 1 below.

TRAILER WIRING COLOURS	CONTACT	PURPOSE OF CIRCUIT/CONTACT	TOP HINGE  RED YELLOW BLUE
YELLOW	1	LEFT TURN INDICATOR	6 D 1 Q 2 BLACK
BLUE	2	AUXILIARIES (LIVE LEAD)	7 BLACK
WHITE	3	COMMON EARTH RETURN	
GREEN	4	RIGHT TURN INDICATOR	BROWN WHITE
BROWN	5	RIGHT/TAIL/SIDE/NO.PLATE	
RED	6	STOP LIGHTS-REAR	4
BLACK	7	LEFT/TAIL/SIDE	AS PLUG LOOKS AT SOCKET

On receipt of the lighting set the connections should be checked and any necessary adjustments made to the connections to your own vehicle.

It is a legal requirement that lights are operable at all times.

Hubs:

WHEEL NUTS ON THE LEFT-HAND SIDE OF THE BRAMBER TRAILERS HAVE LEFT-HAND THREADS, AND THOSE ON THE RIGHT-HAND SIDE HAVE RIGHT-HAND THREADS WHEN VIEWED FROM THE REAR OF THE VEHICLE.

CHECK THE TIGHTNESS OF ALL NUTS AND BOLTS ON THE TRAILER BEFORE USE AND AT REGULAR INTERVALS.

Keel Rollers: are moveable to the required position on the back bone tube, additional rollers are available as extras. The full weight of the boat should rest on these rollers.

Adjustable Side Chocks: should be used as steadying supports. Adjust for height and position and securely clamp.

<u>Jockey Wheels:</u> To operate, unclamp the shaft and allow the wheel to drop to the ground and reclamp. Rotate the handle at the top of the shaft; anti-clockwise to raise the tow hitch, clockwise to lower. Sliding types require unclamping for raising or lowering, reclamp before moving trailer.

Winch Posts and Mast Supports: should be securely clamped in position with bolts and nuts provided. Mast supports are designed to carry one mast only. The forward end of the mast should be secured with the straps fitted to the crutch and lashed to the trailer along its length. A loose mast is a danger, especially when cornering.

Lashing the Boat the to Trailer: We recommend the use of synthetic ropes or straps as these do not stretch readily and minimise chaffing. Lash up to a convenient part of the trailer or lashing eyes where provided. Boats trailed on roller chocks require to be securely lashed to prevent 'creep'.

<u>Cornering:</u> Keep a careful watch on the trailer as it will follow a smaller radius than the towing vehicle.

Reversing: Fix a marker in the rear centre of the stern of the boat visible from the car to indicate which way the trailer is responding. You should steer the car in the opposite direction to that to which you want the trailer to go. Do not 'jack-knife' as this can cause damage. It is often easier to uncouple and manoeuvre by hand.

Launching: In choppy conditions use special care to prevent damage to the boat by 'surging' on to the trailer.

Outboard Motors: If these are carried attached to the transom it is essential that the weight is directly supported and any overhang of the trailer is kept to a minimum.

Towing: Before moving off, ensure that the following have been checked:-

The coupling head on the trailer is secured by depressing the safety catch, lifting the handle, and ensuring that the ball of the towing vehicle is seated in the coupling head — the safety catch on release should lock tight to the body of the coupling.

- 2. That the **reversing catch** on a braked coupling is swung clear of the shaft. It is dangerous to tow a braked trailer with the reversing catch in position, as this prevents the operation of the brakes.
- 3. That the **lighting circuit** is plugged in and operating in line with the towing vehicle signals.
- 4. That the jockey wheel if fitted is in a safe position clear of the ground and securely clamped.
- 5. That the hand brake is in the 'off' position and the brake pawl swung back clear of the ratchet on top of the tow hitch.
- 6. Start slowly, maintain a steady speed at all times, and avoid sudden braking; drop to a lower gear before ascending or descending inclines. It is advisable to make occasional stops to check the following points:—

That tyres are not running hot and are correctly inflated and the coupling is in order.

That the lighting system is functioning correctly.

That the lashing is secure and that the keel of the boat is seated firmly on the trailer.

## MAINTENANCE

Wheels and Tyres: On receipt of the trailer and at regular intervals check the wheel nuts for tightness and that tyre pressures are maintained as shown on the trailer serial number plate, or the Specification in the catalogue.

Suspension: FLEXITOR BONDED RUBBER INDEPENDENT SUSPENSION UNITS are fitted to Bramber Boat Trailers and, apart from occasional attention to the tightness of pinch bolts securing the arms to the Flexitor shafts and the high tensile bolts fixing the Flexitors to the chassis, they require no maintenance.

Hub and Bearings: These are assembled with Shell 'A' Retinax grease before leaving the factory. It is recommended that this grease is used when maintenance of hubs is undertaken. Under normal conditions, hubs should be greased every 5,000 miles or at 6 monthly intervals. In practice, this is often forgotten and the expense of replacement bearings becomes necessary. Hubs not fitted with grease nipples should be repacked with grease after removing the hub caps. Wheel bearings cannot be 100% sealed against water. When the hub is warm and then immersed in cold water, contraction can induce water and small particles of sand through the seals and damage the bearings. The bearing surfaces of steel wheels used in launching trolleys require liberal greasing.

<u>Brakes:</u> These are mechanical and are adjusted before leaving our works. After a short running-in period they should be rechecked and adjusted if necessary. Brake shoes are adjusted as follows:—

Remove the wheel, (left-hand wheels have left-hand thread wheelnuts, right-hand wheels have right-hand thread wheelnuts). This will give access to a hole in the brake drum. Rotate the drum until the adjuster screw is visible through the hole. The screw should then be turned in a clockwise direction until the drum is locked and then turned anti-clockwise by one notch at a time until the drum is free to rotate. After immersion in sea water it is recommended that brakes are flushed out with fresh water — a hole is provided in the back plate for this purpose. The brakes will not be fully effective until dried out, and to assist this several gentle applications of the brakes should be made whilst towing.

Handbrake: With the handbrake lever applied, the gap between the lever and the heel of the tow shaft should be approximately ½". Any necessary adjustment can be made by releasing the handbrake lever and after loosening the cable cleats, retension the cable and retighten cleats.

<u>Paintwork:</u> Both salt and fresh water have an adverse effect on all paintwork or galvanising. It is recommended that painted and galvanised trailers and trolleys are washed down with clean water after use and at regular intervals.

Dismantling for Storage: Preserve all bolts and nuts carefully and ensure that they are all replaced and securely tightened on reassembly.

## GENERAL LUBRICATION

On braking systems, yoke connections and tee lever assemblies should be kept lightly greased.

The shank of the release handle and the safety catch of the trailer coupling should be lightly oiled. The ball and socket of the trailer coupling should be lightly greased, and on braked models the tow shaft bearings of over-run coupling should be regularly greased through the grease nipples provided, and also all moveable parts of any jockey wheel if fitted. On tilt back trailers lightly grease the release catch and the pivot.

Conditions of Sale: These are shown in the Company's quotations, invoices and price lists.

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