

# Smart-Trailers - Operation Manual

## TOW VEHICLE

The first consideration when towing a trailer is to be sure that the tow vehicle has the correct towing capacity. This information is available from the vehicle hand book, or from the technical department of the manufacturer. Ensure that the tow vehicle is well maintained and able to cope with the extra demands of towing a laden trailer. Check the basic safety related areas such as tyre pressures, which should be at the recommended pressure for the relevant load of the tyre (check on the side wall of the tyre or in the vehicle handbook for further information).

## COUPLING Trailer to Towing vehicle

- a) Ensure the tow vehicles tow bar & tow ball are in good condition, ie, structurally sound.
- b) Check that the coupling head cup is well greased.
- c) Raise the coupling head above the tow ball by extending the telescopic jockey wheel.
- d) Position the tow ball under the coupling head, then lower the coupling head onto the tow ball whilst holding the coupling head open. Once the two are firmly engaged the coupling head handle will lock closed. As a precaution twist the coupling head and closely inspect it to be sure that the trailer is properly coupled. On Al-Ko Kober coupling heads there are green indicators which will show when the head is properly engaged on the ball.
- e) Continue to wind up the jockey wheel until fully retracted and the top handle is very tightly locked. Now loosen the main clamp and raise the jockey as high as possible in the clamp, retighten the clamp firmly, ensuring that the jockey wheel is well clear of the brake mechanisms. Warning: If this procedure is not followed it is likely that the jockey wheel will unwind and come into contact with the ground when in transit, causing severe damage. This type of damage is not covered under warranty.
- f) check condition of the break-away cable, if damaged or not present replace immediately. Connect the break-away cable to the towing bracket on tow vehicle. This is a legal requirement. Ensure the tension of the breakaway cable does not apply the brakes under normal maneuvering.
- g) Connect the electrical plug to the socket on the rear of the tow vehicle making sure the keyway in the socket and the slot in the plug are aligned. Check that all lights are operational. Also ensure that the trailer electrical lead is not allowed to drag on the ground, this will wear through the cable and render the lights inoperative.
- h) Ensure that the hand brake is fully off. The handbrake, when off will lie in the horizontal position.
- i) All tyres both on the tow vehicle and the trailer must be correctly inflated to the recommended pressure for the weight/load towed.

## LOADING / UNLOADING PROCEDURE

Loading onto trailers with loading ramps:

Release the ramp retaining springs and slide the ramp out of the rear of the trailer. Locate ramps on the back of the trailer once fully located the ramp will not accidentally detach from the rear of the trailer during loading. Drive or winch the vehicle onto the trailer. Return the ramps to their original positions. Ensure ramp is held under retaining spring tension to eliminate rattling.

Loading onto tilt-bed, ramps free trailers:

Release the deck to 'A' frame securing clamps and close the valve on the hydraulic pump. Pump the hydraulic ram until the rear of the trailer touches the ground. Drive or winch the vehicle onto the trailer. Release the hydraulic valve gradually, making sure no one is under the trailer or in a position likely to result in injury by the lowering deck. Tighten the deck securing clamps.

## TOWING HEIGHTS AND LOAD POSITIONING

To maintain towing safety it is vitally important the trailer is loaded correctly and that the towing height of the trailer is correct.

When coupling an unladen trailer check to see that the 'nose' of the trailer is slightly higher (25-50mm) than the rear of the trailer. Also take account of the affect of any possible loads to be added to the tow vehicle when calculating this. If the trailer nose is too high or too low it is possible that handling difficulties will result. Never try to vary or adapt the trailer towbar or coupling.

When loading a trailer it is absolutely vital that a POSITIVE nose weight is achieved.

Loading cars of front engined design means that the car should be driven up forwards onto the trailer until the tow vehicles suspension just starts to settle. (Rear engined cars must be loaded on a trailer with the axle correctly positioned to balance the rear engined car and still provide a positive nose weight on the tow hitch.)

## LOAD SECURING

It is vitally important to properly secure the load onto the trailer before towing. All Smart-Trailers are fitted with attachment points for Ratchet Straps with soft eye bridles, which are the preferred method of load restraint. It is highly recommended that load securing straps with a safe working load of at least double the weight of the vehicle being secured, be used. A minimum of two front and two rear Ratchet Straps are advised.

## TOWING

There are a few basic logical tips for safe and comfortable towing:

- a) The addition of a trailer to your vehicle lengthens the total wheelbase, therefore when turning it is necessary to widen the turning circle to avoid hitting kerbs.

- b) Remember that the addition of a trailer and its load will reduce your stopping distance, so leave more room for braking.
- c) Do not exceed the maximum towing weight for the tow vehicle.
- d) Remember when reversing to steer the opposite way to the direction in which you require the trailer to travel. This technique requires some practice to become proficient.

## TOWING AND THE LAW

### Towing Speeds:

Twin axle trailer - 50 mph on A roads / 60 mph on Motorways

Motorways - A vehicle towing a trailer is not permitted to use the right hand lane except where the carriage way is two lanes wide.

Number plates - A trailer being towed on the public highway must be fitted with a rear number plate, the same colour and the same number as the tow vehicle.

## PARKING

When parking the trailer for more than 24 hrs, the wheels must be chocked to prevent unwanted movement and the trailer handbrake left in the down (off) position. Failure to adhere to this practice may, in certain weather conditions, result in a seized trailer brake.

If you require any further information or you have any questions please do not hesitate to contact us :-

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