



# **PRG TRAILERS**

*Operation & Maintenance Guide*

## **Section 1**

### **Coupling / Uncoupling: -**

Always make sure you are on level ground before attempting to couple or uncouple the trailer.

PRG trailers are fitted with standard 50 mm ball coupling, unless you have requested pin and eye coupling.

Trailer brakes are designed to work mainly in the forward direction - only 20% efficient in backward motion, so remember if you uncouple on a hill the trailer could roll away.

### **Tow ball height**

Tow ball height can vary between models.

The majority of PRG trailers require a ball height of 430mm (17") to the top of the vehicle tow ball.

When the trailer is connected to the tow vehicle and is on level ground, you are looking for a level trailer, this can be checked by measuring at the front of the trailer to the ground and then just behind the axles towards the rear of the trailer – these measurements should be equal. On some occasions it may be necessary to adjust the tow ball or even fit a packer between the coupling and the "A" frame of the trailer. If you are not sure about this, please contact the PRG technical advice team.

### **Coupling the trailer**

First align your tow vehicle with the coupling head – the tow ball should be directly under the 50mm coupling head. Set the coupling head into the load position – see images below. Make sure the coupling has dropped fully on to the ball. Please note which coupling applies to your trailer.



Alko AK301 head, Lift the black handle before coupling the trailer, Handle will snap closed. Red indicator on the front will show Green when coupled correctly.



Alko / Bradley coupling head, Using your thumb pull the silver catch backwards and lift the handle, this will then stay in the open position. It will snap closed when correctly coupled.

Operate the jockey wheel to lower the coupling onto the tow bar – make sure the coupling has located correctly and the coupling handle has locked into position.

Keep winding the jockey wheel until it locks into the main tube, then release the jockey wheel handle and raise to the highest position possible – secure the jockey wheel with the securing handle.

Attach the brakeaway cable to the tow vehicle.

Plug in the electric cable to the tow vehicle's electrical socket, make sure this is aligned correctly and then ¼ turn the outer section of the plug to lock into position. DO NOT twist the cable because this will unscrew the plug and cause it to fail.

Release the handbrake by pushing the lever to the down position.

Always check the lights are working correctly before you set off.

## **Section 2**

Operation of hydraulic tilt bed.

Tilt bed is not fitted to all models as standard.

### **Manual Tilt bed**

First open the over centre catch that locks the trailer bed to the "A" frame.

Turn the control valve clockwise until it stops.

Pump the handle forwards and backwards to operate the hydraulic pump, this will raise the bed of the trailer into the up position.

Unload as required

Closing the bed – open the control valve slowly by turning it anticlockwise, this will make the bed retract into the closed position – BE CAREFUL this could cause injury.

When the bed is fully closed re-attach the over centre catch and secure in the closed position.

### **Electric tilt bed.**

First open the over centre catch that lock the trailer bed to the “A” frame.

Turn kill switch on for the power to the hydraulic pump.

Press the up button and the bed will start to rise – hold the button down until the trailer is at full tilt.

Load / Unload as required

Closing the bed – Press the down button – this will open the solenoid and allow the hydraulic oil to flow back into the tank – hold the button down until the bed is fully closed.

When the bed is fully closed re-attach the over centre catch and secure in the closed position.

Turn kill switch off.

## **Section 3**

### **Using the ramps.**

PRG Trailers use either individual loading ramps or tailgate ramps depending on the model of your trailer.

Ramp operation on Sport, Minisport, Minisporter, Millennium, Lo-deck Beavertail and Proline trailers

The above models all use individual loading ramps.

Remove the padlock and securing clips. Secure the ramps to the trailer ramp fixing keyway by locating the mounting bolt into the rear location hole in the required position.

Once the bolt has gone through the large hole in the keyway position make sure you slide the ramp to either side, so the bolt head is in between the thinner part of the keyway – This will stop the ramp from bouncing off.

Once the vehicle is loaded – re-fix the ramps to the trailer bed and lock back into position.

## **Section 4**

### **Securing the loaded car.**

First of all you must make sure the weight of the loaded car does not exceed the load capacity of the trailer, commonly known as the payload.

The payload is calculated by deducting the unladen weight of the trailer (empty weight) from the trailer's gross weight, for example if the trailers gross weight is 2600KG and the trailers empty weight is 600KG – it will leave 2000KG for the payload.

The car needs to be positioned correctly on the trailer, more weight needs to be forward of the axles to give the trailer a positive nose weight, Nose weight does vary between models, 80KG – 120KG of nose weight is a good average, If the vehicle is loaded towards the rear of the trailer causing a negative or low nose weight, this can be a cause of instability when towing.

You must always use a loading strap per wheel. PRG Trailers recommend either soft loop loading straps or over the wheel straps depending on the model of your trailer.

Please see picture below of the soft loop strapping system.



You must make sure that the soft loop strap is positioned 2/3<sup>rd</sup>'s of the way up the wheel, If the strap is too high there will be a chance that it can slip off the top of the tyre, if it is too low the strap can fall down and become loose. **Thread the strap through the ratchet head and pull all of the slack through the head before tightening the strap with the ratchet head.**

Over wheel strapping



The ends of the over wheel strap must be hooked into the chassis frame of the trailer (not the punched decking) then the diverter hooks are position forward and rear of each individual wheel. **Thread the strap through the ratchet head and pull all of the slack through the head before tightening the strap with the ratchet head.**

## Maintenance & Service

## Electrical

You must always check the bulbs/ lights on the trailer before every journey

If you have bulb failure –

**BULB LIGHTS:** Remove the light lense cover and replace the bulb with the correct value / voltage. Replace the lense cover and recheck.

**LED Lights:** If you have an LED light failure you will need to replace the complete unit – LED lights cannot be repaired. You can find replacements on the PRG website under the “Parts” section of the store.

The majority of PRG lights are on a super seal plug – so it is very easy the replace a failed unit.

## Grease

There are several grease nipples on the main coupling head and jockey wheel tube. These should be greased on a regular basis.

You should always have grease in the tow coupling head when you have a cast metal unit.

If you have a stability coupling with friction pads fitted the tow ball should ALWAYS be dry with NO grease.

## Wheel bearing

There are 2 types of bearing fitted to PRG Trailers axles, the majority of axles use a fully sealed for life bearing. The other style is called a taper roller bearing.

### Taper roller bearing

This style of bearing should have approx. 1mm of play in the wheel – this bearing should always be packed with grease.

The castle nut should be tightened and then undone slightly to allow the cotter pin to be secured. If this bearing is over tight – it will fail.

### Sealed for life bearing

The sealed for life bearing should have NO play at all – any play in the bearing then it should be replaced.

The bearing should also be completely free from any signs of grease on the outer edges – if there are any signs of grease leaking – the bearing is classed as failed and needs replacing immediately.

These bearings are pressed into the hub and should only be changed by an experienced and competent skilled mechanic/engineer.

### Brakes

Brake shoes should always be inspected on service. There is an inspection hole on the rear of the backing plate to view the remaining surface area of the brake shoes.

Brake shoes should only be replaced by an experienced and competent skilled mechanic/engineer.

### Adjusting the brake

Brakes can be adjusted by removing any slack from the brake rod system, you should be able to move the brake rod forwards and backwards by approx. 1". You can remove the slack from the brake rod by adjusting the locking nut at the rear of the brake compensator.

Brakes can also be adjusted on each individual wheel – using the brake adjuster, wind the adjuster until the brake is locked and the wheel will not turn, then wind the adjuster back by 1 full turn – make sure the wheel moves freely.

This needs doing on ALL wheels – when complete the brake rod will also need to be reset. ANY BRAKE WORK should be completed by an experienced and competent skilled mechanic/engineer.

### Tyres

Tyres should be inspected for tread level, surface cracks and pressure.

Tyre pressure will be printed on the side wall of the tyre or you can refer to our website.

### Chassis Inspection.

The complete chassis should be inspected for any signs of stress, cracks or corrosion, this also applies to the axles and mounting brackets. Any sign of defect should be rectified before the trailer is used.

All nuts and bolts should be checked to the standard torque setting for each individual bolt.