

Trailer Manual

Trailer: _____

Serial No: _____

Purchase Date: ____/____/____



PETRO INDUSTRIAL



petroind.com



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USING YOUR PETRO CUSTOM TRAILER

Always use your trailer in accordance with local regulations, site specific requirements and with consideration to the conditions and area trailer is being used.

PETRO recommends a pre-start check to be carried out each time, prior to using your trailer.

Daily and post transportation checks for damage or wear that may cause any leaks or wear to fuel dispensing equipment.

Meter's and pumps will require regular servicing and maintenance, please refer to additional supplied manuals for specific components or they may be downloaded from our website www.petroind.com

Filters will require regular cleaning and replacement – parts may be obtained from PETRO.

PETRO has included in this manual a pre start checklist for your convenience.

If any of the listed inspection items do not pass a pre start check then PETRO advises not to use your trailer until they have been rectified.

PETRO provides all servicing and repair work required on trailers and are more than happy to assist you should the need arise.

You can contact PETRO on **07 3204 9558**.



PROCEDURES FOR CONNECTING A TRAILER TO TOW VEHICLE

1. Reverse tow vehicle to trailer
2. Raise jockey wheel to allow tow ball to pass under the coupling
3. Reverse vehicle to place tow ball under coupling
4. Lower jockey wheel and place coupling over tow ball
5. Lock coupling handle
6. Raise jockey wheel into horizontal position
7. Attach safety chain(s) If using two cross the chains in an "X" (see below)
8. Connect trailer harness plug
9. Remove park brake and put catch into "open" position (if fitted) *****refer to override couplings page for assistance*****
10. Remove Chocks (if fitted)
11. Test lights individually (do not use hazard lights as this may give a false readings)



TOWING HEIGHT

It is extremely important when you tow your trailer that it is at the correct height for towing. If the trailer is towed at an incorrect height it can affect the suspension and cause problems.

A general rule is that the trailer should be exactly horizontal to the road. NOT low or high at the coupling.

Correct Towing Position



Incorrect Towing Position - Too Low



Incorrect Towing Position - Too High



PROCEDURES FOR UNCOUPLING A TRAILER FROM TOW VEHICLE

1. Park trailer on solid level ground if possible
2. Chock wheels (apply park brake if fitted) **NEVER SOLELY RELY ON A PARK BRAKE TO SECURE THE TRAILER!!**
3. Disconnect wiring harness plug from tow vehicle and place in holder
4. Lower jockey wheel and ensure it is locked into position
5. Release coupling handle and raise
6. Wind jockey wheel to ground level and raise trailer off tow ball
7. If trailer is secure remove safety chains
8. Fit anti – theft devices if required
9. If parking on the roadside - always ensure the trailer is visible at night
10. Always ensure trailer is parked in the correct direction of travel on the road, to maximize the reflectors effectiveness to other motorists

COUPLINGS

To connect your trailer to the tow vehicle, place the coupling directly over the tow ball. Pull the handle directly upwards, whilst using your thumb to release the spring loaded catch on the side.

Now lower the coupling over the tow ball and release the spring loaded catch. The handle should be seated directly onto the coupling body and the spring loaded catch should be sitting flat around the locking pin. Finally secure with an "R" clip as seen below.

If the coupling handle is not resting on the coupling body, (diagram 2) check the anti-rattle adjuster on the toe of the coupling to ensure it is not wound in too far, and not enabling the coupling to clear the tow ball.



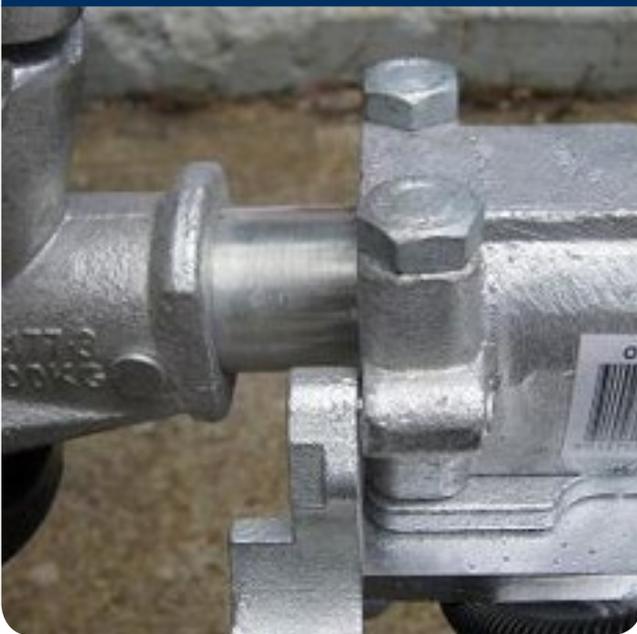
Warning!!

If it can be avoided, do not leave the spring loaded catch in the "up" position when trying to attach your trailer. Nearly 75% of trailers owners and users leave the coupling in this position and drive away. Because the trailer is not locked onto the tow ball it can bounce off, causing significant damage to the towing vehicle, trailer and its contents, or other persons.

OVERRIDE COUPLINGS

The reversing lock should always remain “open” when towing your trailer. This coupling operates by the inertia motion of the trailer being towed behind you and the couplings internal spring. The reversing lock should only be “closed” when reversing the trailer.

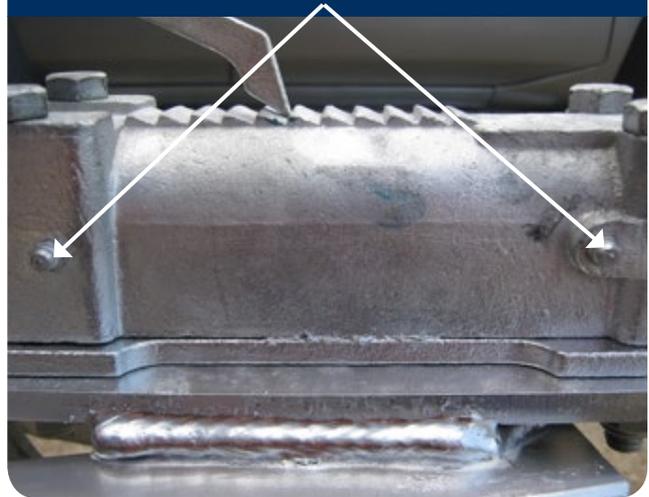
Reversing lock in “open” position



Override couplings are also fitted with grease nipples to keep the moving parts lubricated and need to be greased at least every 6 months.

Coupling bolts should also be checked prior to departure for tension. Early signs of loose bolts are black rings around the bolt heads. Loose bolts can result in them shearing and the loss and damage of your trailer.

Grease Nipples



SAFETY CHAINS

Once the trailer is coupled to your vehicle, attach the safety chain(s) to the vehicle with rated “D” shackle(s). “D” shackle mounts should be found either underneath or beside the tow ball on the tow bar.

Warning!! Never use a padlock to attach safety chains to the tow vehicle whilst driving!!

If the trailer is fitted with 2 safety chains, make sure you “X” chains. (See diagram) This helps “catch” the trailer in the event of an accident, and stop it from digging into the road.



JOCKEY WHEELS AND JACK STANDS

Jockey wheels make maneuvering and coupling your trailer easier. When uncoupling your trailer from the tow vehicle, always ensure the spring loaded handle is fully engaged in both holes in the mounting plate on the jockey wheel.

If the trailer is fitted with a Jack Stand, ensure the foot is on solid, flat, level ground before raising the trailer.

Once the trailer is disconnected the jockey wheel should be fully wound in, to prevent damage and undue stress on the jockey wheel shaft and internal mechanisms.



Before disconnecting trailer from tow vehicle ensure wheels are chocked, and handbrake is applied to prevent trailer from rolling into or away from you or your towing vehicle.



Warning!!

Failure to ensure jockey wheel handle is engaged could result in severe personal injury or property damage!!

LIGHTS

All lights are to be checked prior to every departure. It is the drivers' responsibility to ensure all lights are functioning before travel.

Always check lights individually!!

- Stop
- Tail / Park lights / (Lights activated by turning on the headlights)
- Left Indicator
- Right Indicator
- Reverse lights and beeper (if fitted)

Wiring functions are as follows: (for 7 pin plugs regardless of shape)

1. Left Indicator
2. Constant power 12v (+)
3. Earth (-)
4. Right Indicator
5. Electric Brakes (aux)
6. Stop Lights
7. Tail Lights and clearance lights



NEVER use hazard lights to check indicator function, as they may not show faults. Each light should be checked individually.

ELECTRIC DRUM BRAKES

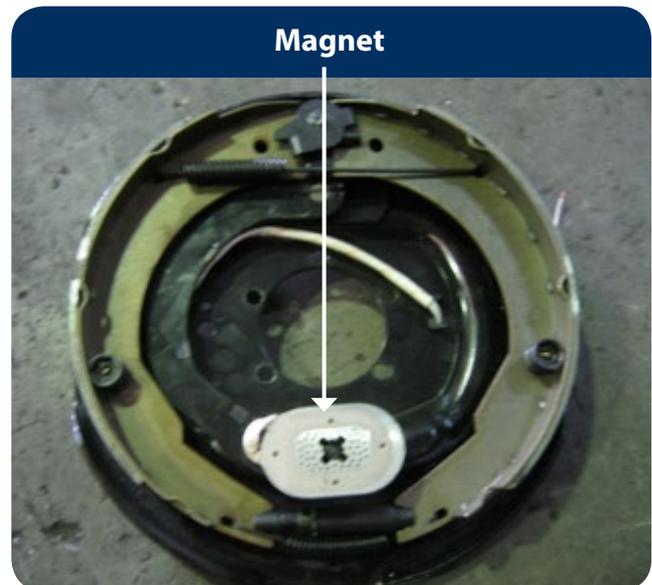
Electric Drum Brakes are used mainly on box and plant trailers. They can be used on trailers with an ATM range, of 750 KG to 4500Kg. The backing plate's electro magnet, receives an electronic signal from the tow vehicle, and activates the spring loaded shoes to brake the drum.

As of July 1 2008 all vehicles used to tow trailers with an ATM over 750kg with electric brakes, must have in cab controllers fitted.

In cab controllers should be set by the driver, prior to departure and minor adjustments made during the early stages of brake application. (Refer to the in cab controller owners' manual for more information.) When the in car controller is correctly adjusted the driver of the tow vehicle should not be able to feel the trailer pulling on the tow vehicle when braking.

Trailers over 2000 Kg

If the trailer becomes detached from the towing vehicle, the breakaway will activate. This is a little black box mounted on the drawbar, with a ripcord clipped in the front. (Ripcords must be separately shackled to the towing vehicle in the event of safety chain or "D" shackle failure). When the ripcord is pulled out, it activates the battery (mounted in the big black battery box on the side of your trailer) and powers the electro magnet inside the drums. Batteries should always be checked 24 – 48 hours prior to departure to ensure they are fully charged.



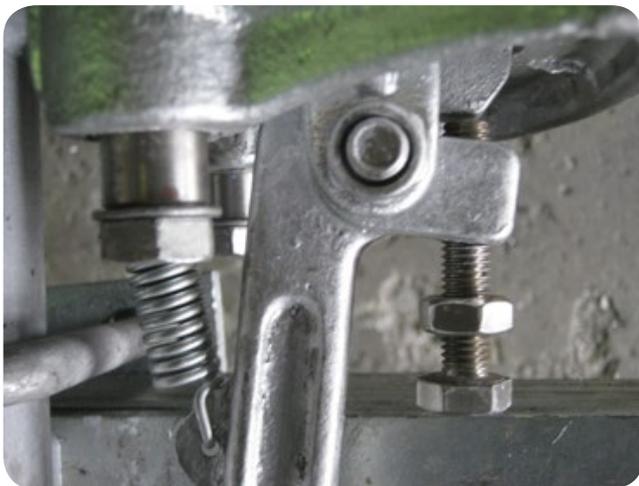
MECHANICAL OVERRIDE BRAKES

The most common braking system fitted to any kind of trailer with brakes, with an ATM of less than 2000Kg. This system can be universally used on any form of towing vehicle (provided it is rated to tow the weight) and operate through inertia of the trailer pushing forward onto the towing vehicle, and the spring inside the coupling.

To adjust:

Mechanical override brakes have 2 points of adjustment as shown below.

1. The pulley adjuster situated at the front of the trailer, which compensates for cable stretch
2. The slack adjuster on the caliper arm for brake pad wear.



To adjust slack cables, simply undo the lock nuts and wind the adjuster in until the ratchet on the coupling reaches approximately 3 notches, and tighten up the lock nuts. To adjust pad wear, simply undo the locking nut and wind in the adjuster bolt until the caliper arm only moves approximately $\frac{3}{4}$ " and re-tighten the lock nut.

When adjusting brakes ensure they are not too tight, and dragging, this will cause overheating, increased fuel consumption and premature pad wear.

PETRO suggests that a professional should always adjust brakes. PETRO can provide this service.



SUSPENSION

Suspension components are the life blood of any trailer, and require regular inspection. PETRO recommends 4,8,12 month suspension inspections for any evidence of loose components, cracks, breaks or corrosion. **Early detection is a money saver!**

Post-delivery from the workshop, suspension components should be checked at the 100Km and 500Km marks, and then at 4,8,12 month intervals.

More regular checks are required for commercial and fleet users.



WHEEL BEARINGS

Wheel Bearings should be checked, repaired or replaced approximately every 12 months, based on the trailers usage. For commercial and fleet operations every 6 months is recommended.

To do a quick check on bearings, try to rock the wheel back and forth. Movement in the wheel indicates loose bearings. If the bearings are loose then a bearing service is recommended.

PETRO provides full bearing services and checks for your convenience.

You can contact our sales staff on **07 3204 9558**.

To the right are the numbers for standard Holden and Ford bearings:

LM (Holden) Bearing Kit	SL (Ford) Bearing Kit
Inner Cone # LM67010 Outer Cone # LM11910	Inner Cone # L68110 Outer Cone # LM12710
Inner Bearing # LM67048 Outer Bearing # LM 11949	Inner Bearing # L68149 Outer Bearing # LM 12741

WARRANTY

1. PETRO Industrial Pty Ltd offers a factory warranty only. This means that the warranty can only be claimed upon delivery of item of equipment (hereinafter called the Product) with proof of purchase to PETRO Industrial Pty Ltd point of purchase unless otherwise agreed with an approved representative of PETRO Industrial Pty Ltd. PETRO Industrial Pty Ltd warrants that each new and unused Product is of good workmanship and is free from mechanical defects provided that:
 - The Product is installed and operated in accordance with the operator's manuals / instructions as provided by PETRO Industrial Pty Ltd.
 - The Product is commissioned by suitably qualified staff.
 - The Product is used under normal operating conditions for which it is designed.
 - The Product is not subject to misuse, negligence or accident.
 - The Product receives proper care, lubrication, protection and maintenance under the supervision of suitably qualified personnel.
2. This warranty expires 12 (twelve) months after shipment, or advice that the Product is ready to ship, (whichever occurs first) by PETRO Industrial Pty Ltd to the first user. PETRO Industrial Pty Ltd offers a 3 (three) month warranty for any dispensing component not already having its own inherent manufacturer's warranty.
3. PETRO Industrial Pty Ltd reserves the right to exclude expressly any on site repairs, except where the Product has been installed or commissioned by PETRO Industrial Pty Ltd or its authorised representatives.
4. This warranty does not apply to:
 - Fluids
 - Filters
 - Fuses
 - Bulbs
 - And other consumable or normally wearing type items unless found to be defective prior to use.
5. Items purchased by PETRO Industrial Pty Ltd will be covered by the Original Item manufacturer's warranty including but not limited to:
 - Engines (Gasoline or Diesel)
 - Compressors (Air or Freon)
 - Storage Batteries
 - Engine Starters
 - Generators
 - Alternators
 - Regulators
 - Governors
 - Transmissions
 - Hoses
 - Nozzles
 - Tyres / Wheels
 - Axels / Springs / Bearings
 - Winches
 - Lights and Solar equipment
 - Any other Product having its own inherent warranty. *(Cont.)*

WARRANTY

Many of the foregoing components are warranted directly by the manufacturer and are serviced by a worldwide network of distributors and others authorised to handle claims for component manufacturers. A first user's claim should be presented directly to such an authorised component service outlet.

In the event any component manufacturer has warranted its component to PETRO Industrial Pty Ltd and will not deal directly with a first user, then PETRO Industrial Pty Ltd will cooperate with the first user in the presentation of a claim to such manufacturer

Under no circumstances does PETRO Industrial Pty Ltd assume any liability for any warranty claim against or warranty work done by, or on behalf, of any manufacturer of the foregoing components.

6. This warranty is extended by PETRO Industrial Pty Ltd only to the purchaser of new Products from PETRO Industrial Pty Ltd or one of its authorised distributors. The products purchased under this warranty are intended for use exclusively by the buyer and its employees and by no other persons and, therefore, there shall be no third party beneficiary to this warranty.
7. A claim of defects in any Product covered by this warranty must be in writing and is subject to PETRO Industrial Pty Ltd inspection and judgment. PETRO Industrial Pty Ltd's liability is limited to repair only. PETRO Industrial Pty Ltd will replace the defective product, F.O.B. factory, once the purchaser, at its expense, has returned the defective product to PETRO Industrial Pty Ltd's nominated shipping place. Replacement and exchange parts will be warranted for the remainder of the original warranty, or for a period of 90 (ninety) days, whichever is the greater.
8. Under no circumstances whatsoever shall PETRO Industrial Pty Ltd and its authorised distributors be liable for any special or consequential damages, whether based on goodwill, lost resale profits, work stoppage, impairment of other goods or otherwise, and whether arising out of breach of any express or implied warranty, breach of contract, negligence or otherwise, except only as may be required by applicable law.
9. Continued use of Product (s) after discovery of a defect voids all warranties.
10. Except as authorised in writing, this warranty does not cover any equipment that has been altered by any party other than PETRO Industrial Pty Ltd.
11. There are no warranties which extend beyond the description of the face hereof. PETRO Industrial Pty Ltd makes no warranties, express or implied, of merchant ability or fitness for a particular purpose.
12. PETRO Industrial Pty Ltd neither assumes nor authorises any person for PETRO Industrial Pty Ltd any liability in connection with the Products sold, and there are no oral agreements or warranties collateral to of affecting this written warranty.
13. PETRO Industrial Pty Ltd acknowledges that this warranty does not exclude or limit the application of any statute (including the "Competition and Consumer Act 2010") where to do so would contravene the statute or cause any part of this agreement to be void.

WARNING. At all times, safety must be considered an important factor in the installation, servicing and operation of the product. Skilled, competent and technically qualified personnel should always be engaged for such tasks.

TRAILER ID SHEET

Tare	
ATM	
VIN #	
Chassis	
Cross-members	
Drawbar	
Coupling	
Jockey Wheel	
Discs	
Hubs	
Bearings	
Seals	
Axle (length, size & turn)	
Springs	
Brakes	
Wheels	
Tyres	
Lights	
Marker Lights	
Trailer Plug	
Winch	
Winch Post	
Rollers	
Skids	
Adjusting Tubes	

Additional Comments:

Inspected By: _____

Date: ____/____/____

Signature: _____

PRE-START CHECKLIST

	PASS	FAIL	Comments:
Light functions:			
• Stop			
• Tail & Number Plate			
• Left Turn			
• Right Turn			
• Hazard Lights			
• Plug/Wiring Damage			
Brakes:			
• Tension set to 3-4 notches of travel			
• Fluid Reservoir Full			
• Pressure when pumped			
• Handbrake engages brakes			
Wheels:			
• Wheel nuts Checked			
• Tyre Tread wear Inspected			
• Rims Inspected for damage			
• Tyre Pressures checked + Spare			
• Bearing shake test			
• Wheel Chocks on unit			
Chassis:			
• Coupling			
• Safety Chains			
• Jockey Wheel			
• Accessories			
• Drawbar Joints and welds			
• Chassis Joints and welds			
• Ramps / Tailgate / Doors			

NOTES:

PETRO Contact Information

AFRICA

South Africa

Factory 1 - 16 Bentonite Street
Alrode, Alberton, Johannesburg
South Africa

P: +27 (0)11 864 7758

F: +27 (0) 11 864 1649

E: sales@petroindustrial.co.za

AUSTRALIA

Eastern Australia

Factory 2, 106 Potassium Street
PO Box 407

Narangba QLD 4504

P: 07 3204 9558

F: 07 3293 4852

E: sales@petroindustrial.com.au

Western Australia

2 Competition Way

Wangara WA 6065

P: 08 6305 0855

F: 08 6305 0319

E: saleswa@petroindustrial.com.au

CANADA

Alberta

Bay A, 233175 Range Road 283

Rocky View, AB T1X 0J9

PO Box 75148

Calgary Alberta T3H 3M1 Canada

P: +1 403 998 7190

TOLL FREE: 1855 44 PETRO

F: +1 403 770 8065

E: sales@petroind.ca

UAE

Dubai

Office LB17330, Lobby Building 17

Jebel Ali Free Zone

PO Box 18602

Dubai, United Arab Emirates

P: +971 488 76688

F: +971 488 76932

E: salesuae@petroind.com

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petroind.com