



Operators Manual

Tipper Trailer

Thank you for your purchase of an Ox Trailer.
Keeping your trailer running smoothly is extremely
important to us.

Please read this manual and familiarise yourself with the operation and maintenance of your trailer before using it to ensure safe and trouble-free operation.

A VIN plate has been installed on your trailer. This contains vital information about the maximum loads and tyre specifications.

Before operating, servicing or altering the trailer, please familiarize yourself with the details in this manual.



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SAFETY



As the owner/operator, you are responsible for the proper operation and upkeep of your Ox Trailer.

You must ensure that you and anyone else who will use, maintain or be near the trailer is familiar with the operating and maintenance techniques and the associated safety information described in this manual.

This manual will walk you through each stage of utilising your trailer and will alert you to basic safety practices that you should follow when using your Ox Trailer.

Keep in mind that safety is all about you.

Good safety procedures safeguard not just you but also those around you. Make sure your safety programme includes these procedures. Ensure that all users of this trailer are familiar with the standard operation procedure.

- Before allowing users or staff to use this trailer, Ox Trailer owners must provide operating instructions.
- A safe operator is the most crucial safety tool. The operator must read, comprehend, and adhere to all operating and safety directions in the manual. Accidents can be prevented.
- A person is ineligible to operate the equipment if they have not read and comprehended all operating and safety instructions. Uneducated operators put themselves and others in danger of serious harm or death.
- Don't change or modify the equipment in any way. Unauthorised alterations could shorten the trailer's lifespan, compromise its function and/or safety and may void any warranties.
- **Act Responsibly! Work Safely!**

GENERAL SAFETY



- Before using, servicing, or adjusting the trailer, read the Operator's Manual and all safety signs.
- Only competently qualified individuals may operate the trailer. The machine cannot be operated by a non-trained individual.
- Keep a first-aid kit on hand and be familiar with its use in case you need it.
- Before servicing, modifying, or repairing anything, put all controls in neutral and wait for all moving parts to stop.
- Examine safety-related items once a year.

Warning

Before attaching to and towing this trailer, be sure the towing vehicle is equipped with an electric brake control unit that complies with all applicable laws.

Warning

Never place yourself or anyone else under the body when installing a safety strut; if the tray were to fall unexpectedly, significant harm or death could follow. Put yourself in a side position.

Warning

Never move a trailer that has a safety strut supporting a tray as this could cause structural damage, serious injury or even death.

Warning

Never place yourself or anybody else underneath an elevated trailer body. Death or severe harm could follow.

Warning

Never use the tipping trailer until you have obtained thorough training knowledge and have fully read the operator's manual.

Warning

Never operate the tipping with the trailer disconnected from the vehicle.

ATTACHING YOUR TRAILER

50MM TOW BALL

1. Ensure the trailer hand brake is engaged. (Figure 1)
2. Check that the coupling lock is raised in the release position.
Crank the jack-stand until the front of the trailer is raised to be above level.
3. Reverse the tow vehicle until the tow ball is positioned in line and under the coupling of the trailer. (Figure 2)
4. Wind down the jack-stand, so that the coupling encompasses the tow ball.
5. Lower the coupling lock fully and install R pin (optional padlock) into the coupling lock. (Figure 3)
6. Secure safety chains. They must diagonally cross over one another to latch onto the hooks of the tow vehicle. (Figure 4)
7. Shorten chains to allow the trailer hitch to be held above the road should the trailer become disconnected. The crisscross of the chains forms a cradle that can catch the trailer if it becomes disconnected.



Figure 1



Figure 2



Figure 3

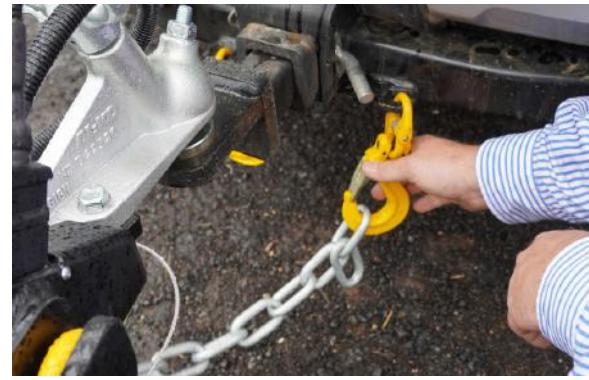


Figure 4

DO NOT shorten the chain to the extent that it comes under any strain load while turning the trailer to the extremities. Allowances must be made for approach and departing angles.

ATTACHING YOUR TRAILER

50MM TOW BALL



8. Ensure that one of the chains is intertwined with the breakaway cable. This must also be hooked onto the tow vehicle.
If the chains were to come loose, this cable would activate the emergency brakes within the trailer. (Figure 5)
9. Any damaged or worn D shackles should not be used and need to be replaced immediately.
10. Connect the trailer plug to the corresponding car receiver. Secure the trailer plug by locking the cover of the towing vehicle connector over the trailer plug.
Check the secure attachment by applying light force on the lead. (Figure 6)
11. Check the function of blinkers, brake lights and reverse lights.
It's best to test each blinker instead of activating the hazard lights as this can often give a false reading. (Figure 7)
12. Draw up the jack stand.
Release the lower latch and pull out the pin, slide the extension into itself, until just one hole remains and insert the pin back in.
(Figure 8)



Figure 5



Figure 6



Figure 7



Figure 8

ATTACHING YOUR TRAILER

50MM TOW BALL



13. Put the jack stand into its travel position.

There are **4 holes** - **1 set is vertical and 1 set is horizontal.**

Pull the pin out of the vertical position and rotate the jack stand till it is horizontal and in line with the chassis.

Re-install the pin into the horizontal holes and securely latch. (Figure 9)



Figure 9

14. Release hand brake and you're good to go!

NOTE

All trailers over 2000kg ATM are to be fitted with a Break-Away System.

- Check the condition of the Break Away battery and circuit by pushing the 'test' button on the unit. (Figure 10)
- Green light LED indicates safe operating conditions.
- If red LED light is displayed, charge the battery of the Break-Away System and re-test.
- Connect the Break Away System wire cable to the tow vehicle, preferably not to the towbar, but to a separate part of the chassis.
- VSB1 National code requires that the Break Away monitor and brake unit both charge from the tow vehicle. 1 of 2 options are fitted to your trailer.
 - Standard 7-pin flat plug
 - 12-pin round trailer plug



Figure 10

MAINTENANCE OF YOUR TRAILER



WEEKLY

- Lubricate all suspension points, more often in wet or dirty conditions.
- Check tyre pressure. Adjust to the tyre pressure/load specifications for your tyres and load kg.

MONTHLY

- Check and adjust anti rattle Bolt on ball. Contact ball only, do not apply downward pressure onto ball.
- Check and Adjust wheel bearings.
- Check condition and replace/grease all suspension components.
- Adjust brakes then adjust parking brake.
- Check condition of hydraulic circuit.
- Check Axle U bolt torque. Torque to 141 ft/lbs.
- Lubricate hinge points, ram rocker bushes, and ram rod ball.
- After 15 tips or monthly (whichever occurs first), charge battery. Use a 6 amps or greater charger, making sure not to overcharge. There are battery terminals located on your chassis.

If you are unsure or incapable of completing the steps above, contact a qualified accredited mechanic/Ox Trailers to do the services.

The next steps in maintenance require the safety strut to be installed.

SAFE INSTALLATION OF THE SAFETY STRUT

WARNING - While installing the safety strut never position yourself under the body. Serious injury or death could result from the tray unexpectedly dropping. Position yourself to the side.

1. Raise unladen trailer bed until the ram limit switch cuts in. (Figure 11)
2. Lift Pivot Strut. (Figure 11)
3. Locate retainer socket. (Figure 12)
4. Lower hydraulic ram and observe that the strut is located correctly as they weight of the tray is taken by the strut. (Figure 12)



Figure 11



Figure 12

MAINTENANCE OF YOUR TRAILER



WARNING- Never move trailer while the tray is being supported by the strut, as structural damage and collapse of the tray may result. Warranty does not cover such damage.

- Check Battery electrolyte level.
- Check hydraulic level with clean dipstick. At the third ram stage the level should be between half and 2/3 of a full tank.
- Grease all Hydraulic Ram parts, including Ram connection to Trailer, 2 x Ram Foot pads, and 2 x Rear Tipping Bushes (accessed from rear)

HALF YEARLY

- Check and repack wheel bearings with the appropriate grease.
- Check brake shoe conditions. Brake shoes should be replaced if brake linings are below 4mm.
- Check the condition of suspension components.
- Check the general tightness of all bolts and hardware, battery terminals for corrosion and condition of warning signs and placards. Replace any missing or defective items.

If you are unsure or incapable of completing the steps above, contact a qualified accredited mechanic/Ox Trailers to do the services.

REPAIR/SERVICE OF INOPERATIVE HYDRAULIC UNIT

There are no owner serviceable parts in Hydraulic power pack. Contact a qualified accredited auto electrician or accredited hydraulics expert for service or return to Ox Trailers for servicing/repair.

GENERAL TIPS



CHECKS DURING A TRIP

Soon after starting each day's travelling with the trailer, stop and check:

- The coupling and safety chains, to make sure they are correctly secured and tight.
- The tyres, to make sure they are still inflated to correct pressure and are not rubbing against the mudguards, suspension, trailer body etc.
- Make one or two test stops from low speed to confirm that the trailer brakes are operating and functional.

LOADING YOUR TRAILER

You may transport and dump free-flowing solid materials like soil, sand, and gravel with your Ox Trailer. The standard floor is made of 3mm material and isn't made to endure the impact of coarse objects with a density higher than 1.8.

Similarly, even though the surface of a powder-coated/painted object has excellent adhesion and abrasion resistance, it shouldn't be subjected to dangerous/corrosive chemicals.

Your trailer's payload capacity is roughly equal to the ATM weight. A 3.6m x 2.1m trailer's volumetric capacity at water level is $3.4m^3$.

1. Within the tray body, always centre the load both laterally and longitudinally. The recommended tow ball weight is Australia is about 10% of your aggregate trailer mass or a maximum of 350 kilograms - whichever is the lowest.
2. Prevent loading material with varying densities or moisture in the same load as they may result in varied flow characteristics.
3. Protect the load from bouncing/falling out over the sides of the tarp or similar.



- Centre the load laterally and longitudinally.
- Ensure all loads are tied down.



- Use a tarp for loose loads.
- Don't expose your trailer tray to dangerous/corrosive chemicals.

GENERAL TIPS



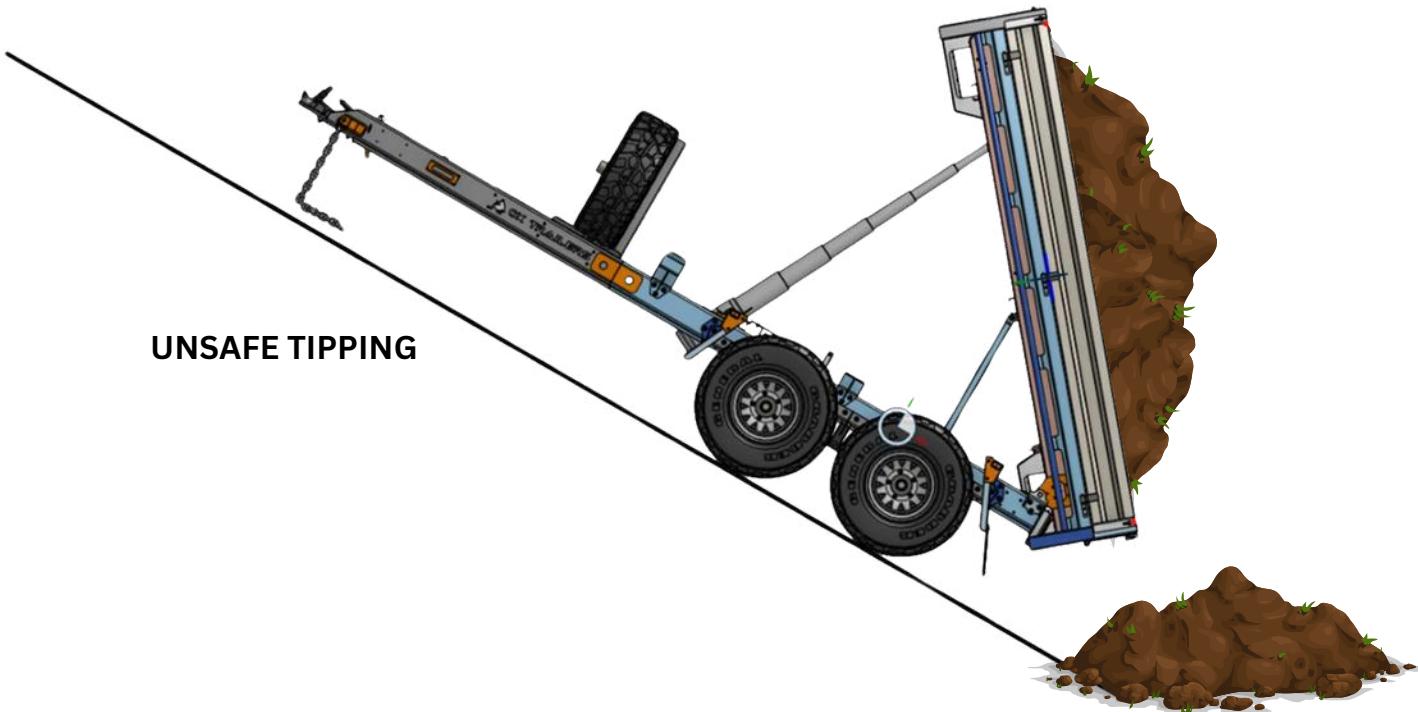
SAFE TIPPING

Ox trailers does NOT take any responsibility for damage/injury to personnel/equipment if the operator is tipping the trailer unsafely and incorrectly. Refer to images below for safe tipping.

SAFE TIPPING



UNSAFE TIPPING



GENERAL TIPS

- Never try to tip a trailer without a suitable towing vehicle attached.
- Select a firm, level surface to tip on.
- Check for overhanging structures or powerlines that can affect the tip height.
- NEVER tilt beneath powerlines; doing so could seriously hurt you and those around.
- Never tilt across a hill. Face the trailer combination up the slope if it is absolutely required to tip on a slope.
- Inspect the hydraulic circuit for damage. If damage is obvious, instigate repairs asap and abstain from tipping.
- Engage the parking brakes on your car and your trailer. (Figure 1)
- Remove any Nets or Tarps
- Let down the tailgate
- Activate the battery isolator situated at the front of the trailer. (Figure 2)
- Stand clear of trailer, near the front but at least 5 metres at 90 degrees from the start of the drawbar taper. (Figure 4)
- Never position yourself or others under a raised body. Serious injury or death could result from the body dropping unexpectedly.
- Commence tip via controller. (Figure 3)
- Although it may not always be possible, a smooth flow of product is strongly desired. If material discharges from only one side of your trailer, stop elevating the body and allow it to rest before manually removing the remaining product.
- After safe discharge, safely lower the tray body.
- Once tray is fully seated on the mounts, turn the battery isolator to the OFF position.
- Close rear tailgate, taking time to ensure all debris is removed from tray sill to ensure proper closure of the tailgate/DropSide.



Figure 13



Figure 14



Figure 15



Figure 16

GENERAL TIPS



WEIGHT GUIDE

Tare Weight, ATM, GTM and Maximum D-Value in KN/KG on a Tow Coupling - Refer to the manufacturers VIN Plate.

50mm ball couplings on a trailer rated to an ATM of 3500kg have a maximum D-value of 20kN or 2039.43kgs.

70mm ball couplings on a trailer rated to an ATM of 4500kg have a maximum D-value of 23.24kN or 2369.82kgs.

ATM (Absolute Trailer Mass) - Refer to the manufacturer's compliance plate.

GTM (Gross Trailer Mass) - Refer to the manufacturer's compliance plate.

TYRES

Axle Load/Tyre kg and Recommended Pressure

Standard Tyre Offering - 245/75/R16 AT Tyre

Single - 1400kg at 35 - 45 PSI

Dual - 1260kg at 35 - 45 PSI

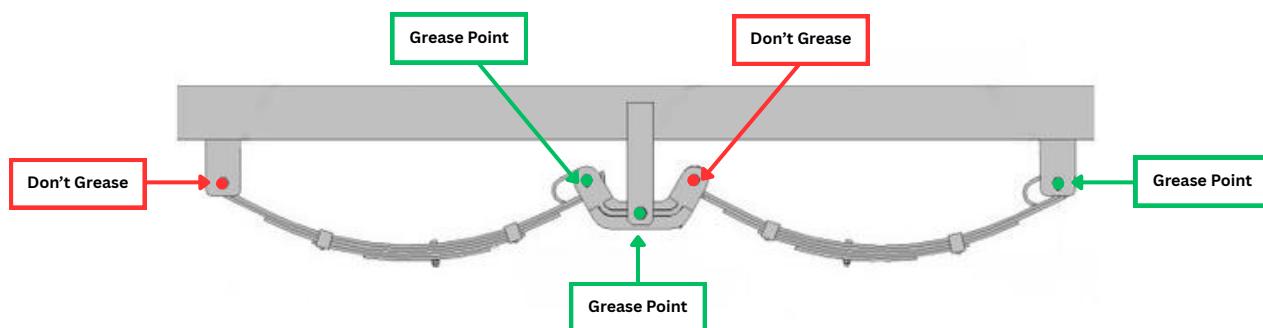
Please refer to the tyre manufacturer for the correct pressure and load rating for any other tyres other than those listed above.

SPARE PARTS

When ordering spare parts from Ox Trailers, quote the VIN, model number and the manufacture date of your trailer.

GREASING

Lubricate all suspension points, more often in wet or dirty conditions.



TOWING VEHICLE

Vehicles must be suitable for the type of trailer to be towed.

Vehicle manufacturers usually indicate in owner's manuals the maximum weight and other features of trailers they consider to be appropriate for the safe operation, performance and durability of their vehicles. These limits should not be exceeded.

Vehicles must be properly equipped for the trailer to be towed.

- Towbars and couplings must be of suitable type and capacity
- Electrical sockets for lighting and brakes are needed
- A suitable brake controller must be fitted.
- Extra mirrors may be needed when towing large trailers
- For vehicles with automatic transmission, an extra transmission oil cooler may be advisable.
- 50mm 3.5 tonne tow ball machined from steel for trailers up to 3.5 tonne
- 70mm 4.5 tonne tow ball machined from steel for trailers up to 4.5 tonne

Your Vehicle Performance

All trailers reduce the performance of the towing vehicle. They increase fuel consumption and decrease acceleration, braking agility, general control and manoeuvrability.

These effects worsen as trailer size and weight increase relative to that of the towing vehicle.

GENERAL TIPS

WIRING CODE

As per VSB1 v6 12 & 24-volt multi-volt setups. Effective from 2/8/2022

Plug Type		Circuit	Colour
7 Pin	12 Pin		
1	1	Left Hand Indicator	Yellow
2	2	Reversing Signal	Black
3	3	Earth (Ground) Return (Pins 1, 4, 5, 6, 7, 12)	White
4	4	Right Hand Indicator	Green
5	5	Service Brakes	Blue
6	6	Tail (Stop) Lamps	Red
7	7	Tail Lamps, Clearance lamps, and side markers	Brown
	8	Battery Supply (+)	Orange
	9	Auxiliaries (12v) Ignition > Brake Safe Charge	Pink
	10	Earth (Ground) Return (Pins 8, 9, 11)	White
	11	Accessories (+12/24v)	Grey
	12	Auxiliaries	Violet

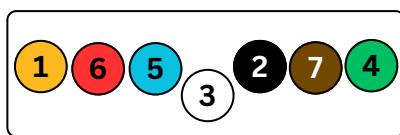
NOTES

Circuit Pins **3** and **10** may be linked at vehicle (20-amp)

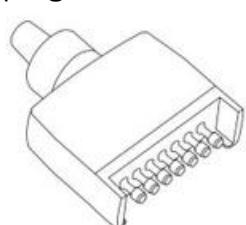
Circuit Pin **8** and **9** 12-volt only (Brake Safe charge must be 12-volt supplied)

Supply installation of 12-volt only, Pin **11** and **9** may be linked to vehicle (10-amp min)

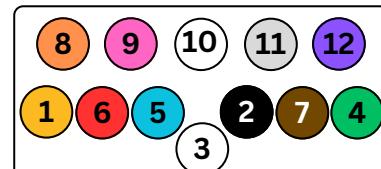
7-pin



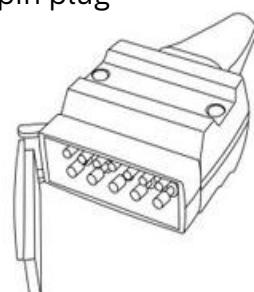
7-pin plug



12-pin



7-pin plug



WARRANTY



Ox Trailers will repair or replace, in its opinion, without charge for parts or labour to the retail purchaser, any defective part of the equipment for a period of 36 months of delivery to the first retail customer.

EXCEPTIONS TO THE WARRANTY

1. In no event shall the owner be entitled to recover for incidental, special or consequential damages such as, but not limited to, loss of load, loss of profit or revenue, other commercial losses, inconvenience or cost of replacement of rental equipment.
2. **Repair, Maintenance, and service items not related to defects:**
3. **OEM Warranty** is covered by the OEM Manufacturer and in no circumstance are Ox Trailers liable for warranty claims on the OEM equipment fitted. This included accessories fitted to the trailer such as Hydraulic Cranes, Oil Reels/Hoses/Pumps, Hydraulic Powerpacks, Hydraulic Rams, Trailer Suspension etc.
4. Loss or damage during shipment.
5. Failure resulting from improper maintenance.
6. Damage caused by operator abuse, negligence, or improper operation.
7. Non-defective items replaced due to customers demand unless authorised by Ox Trailers.
8. Non-reimbursable maintenance items including but not limited to, oil.
9. All costs for repairs or replacement of parts not shown to be defective.
10. Damage due to accidents.
11. **Original Equipment Batteries:** are warranted for full replacement for the first three months and on a prorated replacement cost basis for the next three months.
12. **Tyres** are warranted directly by the tyre manufacturer's agents only, and not by Ox Trailers.
 - a. **Paint/Coating Warranty** is void if the damage has been caused by corrosive substance, heat or abrasion.
 - b. **Replacement Parts** will be warranted for three months or for the balance of the warranty, whichever is greater, providing the bill of sale is attached to the warranty claim.
 - c. The terms of this warranty are subject to commonwealth and state legislation. Ox Trailers reserves the right to make changes in accordance with these acts at any time without notification or obligation. The stated warranty contained in the Ox Trailers Warranty Policy applies in all situations unless the law provides a greater warranty in the jurisdiction of the retail customer.
 - d. Ox Trailers reserves the right to continually improve its equipment and reserves the right to change its products or specifications at any time without notice or obligation.

WARRANTY



OWNER'S WARRANTY OBLIGATION

The owner is responsible for transporting the equipment to an authorised Ox Trailers dealer or reimbursing the dealer for any travel or transportation costs related to this warranty.

The owner must read, understand, and follow the maintenance, safety, and operational guidelines in the operator's manual.

Additionally, the owner must ensure the Pre-Delivery Inspection Sheet is completed, signed, and returned to Ox Trailers by the dealer to register the unit for warranty.

Warranty commences on the date of purchase	
Purchaser's Name	
Purchaser's Address	
Date of purchase	
Trailer Type	
VIN number of trailer	
Dealer's Name	
Dealer's Agent	