

Owners Manual



Welcome to the TOWREX family!

Thank you for purchasing a Towrex Trailer. Towrex would like to welcome welcome to the Towrex family.

The Towrex Trailers owner's manual has been prepared to familiarise yourself with the operation, care and maintenance of your new Towrex Trailer. The Towrex Trailers owner's manual also includes a lot of important safety information so please ensure you read it cover to cover before using your new Towrex Trailer.

Towrex Trailers staff and Towrex Trailers dealer staff are here to help and assist you. If for any reason you are unsure of how to operate or care for your trailer, please head to <u>www.towrex.com.au</u> to locate your nearest office or dealer for assistance.

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1-- Caring For Your Towrex Trailer Chassis

1.1 Galvanised Surface

Your TOWREX trailer is coated in a hot dip galvanised finish. The environment in which the trailer is used, stored and maintained determines the level of deterioration of the galvaninsing surface. It is normal as the galvanised surface ages, that a white powder formation be evident on components. This is normal excretion from the zinc, called a calcium carbonate that forms as a layer over the zinc to protect itself from the elements. This cosmetic only build-up can be removed with a soft wire brush, but is recommended that for maximum protection to be left alone.

1.2 Wash Your Trailer

Trailers must be washed thoroughly after each use with environmentally safe detergent and fresh water. The trailer must be dry before placing into storage. Regularly washing of your trailer will extend the reliability and finish for many years. Cosmetic appearance is not covered under your Towrex warranty.

1.3 Trailer Drain Holes

All drain holes throughout the trailer frame must be kept clear and checked on a regular basis. This allows for drainage of any trapped water to exit the frame. The drain holes also allow for air to move around your trailer to keep it dry while in storage.

2-- COUPLINGS

WARNING: Do-not get into the habit of using the spring loaded catch to hold the plunger in the up position while connecting to your vehicle. Driving off with the coupling not engaged may cause serious injury or death. WARNING: Always check the coupling for wear or damage before each use. . WARNING: The lock-out spacer must be disengaged to operate brakes.

2.1 Disconnect

Apply the hand brake (if fitted) or chock the wheels. Swing the jockey wheel down but do not lower at this point. Disconnect the wiring, lift the coupling handle while opening the safety spring loaded catch, and begin raising the trailer with the jockey wheel. Raise the trailer to a height where the coupling will clear the tow ball, then release the handle and safety catch returning to the locked position. Finally remove the safety chain from the vehicle.

2.2 Connect

Align the coupling directly over the tow ball of the tow vehicle, lift the coupling handle while opening the safety spring loaded catch, and begin lowering the trailer by lowering the jockey wheel carefully monitoring the process. Let the coupling slide down over the tow ball then release the handle and safety catch locking the ball into the coupling. If the coupling handle and safety catch do not return to the locked position, check the tow ball anti-rattle bolt on the front of the coupling is adjusted correctly. Release the hand brake (if fitted) or remove the wheel chocks. Swing up jockey wheel. Connect wiring and safety chain.

2.3 Over-Run Couplings

Over-Run couplings require you to engage the reverse lock-out spacer while reversing. The lock-out spacer must be disengaged while underway for the brakes to operate.

2.4 Maintenance

Over-Run couplings require grease to maintain functionality. All couplings require maintenance and greasing at the handle shaft points every **6 months** or when there is no grease present on the shafts, at the same time all the bolts and nuts need to be checked for tightness. Couplings are subject to wear based on a few factors. Replacing the coupling is due when the either the receiver / lock / handle show signs of wear or damage.

3-- SAFETY CHAINS

Warning: DO NOT USE a pad lock or carabiner between the safety chain and the tow vehicle while travelling. Always follow your state regulations.

3.1 Connecting Safety Chains

Safety chains MUST be connected to the tow vehicle via a load rated "D" shackle supplied as supplied on your Towrex Trailer.. It is important the safety chain is the correct length to prevent the front end of the drawbar from hitting the ground if the coupling is disconnected from the tow vehicle. Safety chains must be as short as practicable while connected to the towing vehicle and crossed over is fitted with 2 chains.

3.2 D shackles

Australian Standards require all D shackles to be load rated and sufficient for the trailer / load. Your Towrex Trailer is supplied with a D Shackle that meets and exceeds the Australian Standards.

3.3 Maintenance

Always check the condition of the safety chain and D shackle for wear or damage before each use. Applying a little grease to the thread of the D shackle will make the tighting and loosening of the D shackle pin much eaiser. D shackles do not last for every and are classed as a consumable part. Replacement is recommended when wear is evident within the internal arch of the D shackle.

4-- JOCKEY WHEEL

WARNING: Make sure the 2 pins from the handle are seated and lock the mechanism in place before use.

4.1 Operating Jockey Wheel

To swing the jockey wheel down and engage the use or up for stowage - Pull the swivel lock handle towards yourself to release the mechanism allowing the jockey wheel unit to rotate. To raise or lower the trailer with the jockey wheel - Crank the handle in a clockwise direction to raise and anti-clockwise to lower.

4.2 Maneuvering Trailer

All Towrex trailers are fitted with a swing up, side crank Jockey Wheel. When maneuvering your trailer while disconnected from the vehicle, the Jockey wheel should be almost completely in its wound down position. With the jockey wheel in its full extended position you will strain and damage the jockey wheel. Bent or strained jockey wheels are not covered by warranty.

4.3 Maintenance

Greasing the internal leg of your jockey wheel is required as needed. Greasing of the gear box is done via the grease nipple at the top of the jockey wheel located opposite the crank handle. A general inspection is advised before each use of the jockey wheel.

5-- SUSPENSION & AXLE

WARNING: Any suspension & axle repairs or maintenance must be completed by a qualified mechanic.

Towrex Trailers are supplied with 2 types of suspension systems. All single axle trailers and most dual axle trailers are Slipper Spring. TRW series trailers & 3000kg GVM trailers and over are supplied with Load Share Suspension.

5.1 Suspension Maintenance

Slipper Spring suspension almost requires no maintenance other than visual inspection of the spring and bush for damage or wear. Load Share suspension requires greasing of the bushes every 12 months or as needed for heavy use. Visual inspection for damage or wear is recommended before each use of all shackle points.

5.2 Axle Maintenance

All Towrex Trailers have fixed wheel camber and cannot be adjusted like a motor vehicle. Trailer axles may have a bow in the centre between 5mm to15mm. This is within tolerance Please refer to section 6, & 7 for Axle maintenance.

5.3 Axle & Suspension Care

Your Towrex Trailer complete undercarriage should be washed after every use are be inspected at least twice yearly for any evidence of loose u-bolts or bolts, corrosion, wear or breakage..

6-- WHEEL BEARINGS

WARNING: Any wheel bearing repairs or maintenance must be completed by a qualified mechanic. WARNING: Do not overfill the bearing protector. 2-4 pumps of a grease gun is sufficient for maintenance.

6.1 Checking Wheel bearings

Wheel bearings must be checked every 6 months at a minimum. For a quick wheel bearing check – Attach the trailer to a vehicle, jack up 1 wheel and give it spin and a wobble from side to side. If there is a grinding sound or play/movement, the bearing you will need servicing or replacement. Visually inspect the rear grease seal for leaks or damage.

6.2 Wheel Bearing Protectors / Bearing Buddies.

Checking bearing buddies for sufficient grease is as easy as pressing on the grease nipple. If spongy they have sufficient grease, if firm, then they need to be topped up. Use a grease gun with high temperature wheel bearing grease to top up the grease level.

6.3 Wheel Bearing Part Numbers or Measurements.

Ford or SLM Bearing sets: Inner Bearing - 68110/68149 Outer Bearing - 12710/12749 Marine 2 Piece Seal - 43.9mm Grease cap - 45.20 mm

Ford or SLM Parallel Bearing Sets: Inner Bearing - 68110/68149 Outer Bearing - 68110/68149 Marine 2 Piece Seal - 43.9mm Grease cap – 63.5mm

7-- BRAKES

WARNING: Any wheel bearing repairs or maintenance must be completed by a qualified mechanic.

WARNING: The brake stay must be rotated rearward while not being used.

7.1 Over-Run Brakes

Please see section 2.3 Over-Run couplings.

7.2 Mechanical Hand brake Operation

While parked or detached from the vehicle, the trailer hand brake must be engaged. To engage the hand brake, pull back firmly on the leaver, rotate the brake stay over and lock in place with the teeth on the over-run coupling. To disengage the hand brake, pull the leaver back firmly and rotate the brake stay up and out of the way. The brake stay must be rotated rearward while not being used.

7.3 Over-Run Brake Maintenance

Cable adjustment- Using the adjustor located at the front of the trailer, wind in to tighten cable and wind out to loosen cable. Be sure to tighten locking nuts once finished. Brake caliper adjustment-

As the brake pads wear you may have to adjust the plunger bolt to reduce play in the caliper actuator arm. 5mm-10mm actuator

arm movement is correct adjustment. Be sure to tighten locking nut once finished.

Visually inspect all braking components for wear or damage. Using spray grease, lubricate moving parts avoiding contact with the disc or pad surface.

Power Assisted Brakes Operation & Maintenance

Please refer to the trailer braking unit individual owner's manual supplied by your Towrex Trailer dealer.

8-- TYRES & WHEELS

8.1 Tyre Pressure

Correct tyre pressures are located on the trailers compliance plate, also on the sidewall of the tyre. Checking tyre inflation pressure should be carried out while the tyre is cold or before use of the trailer. Don't forget the spare wheel!

8.2 Tyre Wear

It is normal for trailers to have a slight run out of wheel camber which in most cases is not noticeable by eye. If the trailer is overloaded or does not have the correct inflation pressure in the tyres, rapid wear will occur on the inside edge of the tyres. If a tandem trailer has excessive side wear on its front tyres only, this has been caused by the trailer not being towed level with the vehicle and has transferred most of the trailers weight to the front wheels. Visually inspect tyres for damage or wear while checking pressures.

8.3 Tyre Rotation

Wheel/Tyre rotation is recommend every 12 months or 6 months for heavy use.

8.4 Wheels

Correct wheel nut torque is 100-110nm.

Visually inspect wheels before each use of the trailer.

9-- WINCH OPERATION & MAINTENANCE

WARNING: The winch hook along with the safety chain must be secured to the bow eye of the boat at all times.

WARNING: The winch hook along with the safety chain must only be disconnected from the bow eye of the boat when the boat and trailer are in the water and you are ready to launch the boat.

WARNING: The winch hook along with the safety chain must be secured to the bow eye of the boat before pulling out of the boat ramp after retrieving the boat.

WARNING: Your Towrex Trailer has been paired with the operate manual winch based on the capacity of the winch and the GVM/ATM of the trailer. The winch/trailer combination is designed to retrieve the boat from the water not the beach, ground, storage stand or other fixed positions.

NOTE: Towrex will not warrant or be responsible for any damage caused to trailer and or trailer accessories or boat for misuse of winch or failure to connect safety chain.

9.1 Get To Know Your Winch

The pawl is the latch that clicks over the drum's teeth as you wind the boat on, stopping the strap from feeding back out under gravity by allowing the drum to wind only in one direction. The drum is the wheel that holds the strap.

9.2 Winch Operation

To release the winch - Apply pressure to the winch handle and rotate the pawn to disengage from the drum allowing the strap to feed out.

To retrieve the boat – Always have the pawl engaged with the drum while retrieving the boat. Connect the winch hook to the boats bow eye, engage the pawl and crank the handle to retrieve the strap and pull the boat onto the trailer. Pull the bow eye up snug under the bow roller, connect the safety chain and stow the winch handle (3 speed winch).

9.3 Winch Maintenance

Grease the drum teeth and gears regularly as needed. Oil the bushes as needed. Wash and rinse after each use. Always make sure the winch strap is not twisted or frayed on the edges. Visual inspection of the winch each use.

9.4 Electric Winches

Towrex Trailer does not supply or sell electric winches. Please contact the winch manufacturer for maintenance, trouble shooting or instructions.

10-- TRAILER LIGHTS

Warning: avoid using high pressure washers, as this can damage the tail light surface.

Towrex Trailers are fitted with fully sealed LED lights that are designed for use on boat trailers. Trailer lights are required by law, and you need to make sure they are functioning correctly every time. Simply plug in the trailer light wiring plug to the vehicle and check by operating your brake, park lights and indicators. Side lights / marker lights will operate with your vehicles park light system along with your taillights. Wash your lights regularly while washing the trailer.



11-- FITTING BOAT TO THE TRAILER

NOTE: Towrex Trailers strongly recommends you have your new Towrex Trailer adjusted to your boat by a Towrex Dealer or qualified boat mechanic. Towrex will not take responsibility for damaged caused to boat, trailer or other items due to incorrectly adjusted trailer. Towrex Trailers will not warrant damaged caused to the trailer due to adjusting or adjustment.

Where possible always contact or follow the boat manufactures guide and recommendations when adjusting trailer to suit boat. All boats are different and the following is a guide only. All trailers will have a retrieving tolerance to either side of the centre line of the trailer up to 50mm.

11.1 TRA Series

Boat should sit hard on all keel rollers. Skids or bunks to be positioned as far out from keel as possible then adjusted to take the minimum amount of weight to steady the boat. If they take too much weight of the hull, then the boat will be hard to launch and retrieve.

11.2 TRF Series (with keel roller rack)

Boat should sit hard on all keel rollers. The outside rollers are to be positioned on the outside of the strake. Every roller should be touching the hull and where possible, be clear of any strakes built into the hull. Rollers should be adjusted to take the minimum amount of weight to steady the boat. If they take too much weight of the hull, then the boat will be hard to launch and retrieve.

11.3 TRF Series (without keel roller rack)

All the inside wobble rollers should be as close to the keel as possible. The outside rollers are to be positioned on the outside of the strake. Every roller should be touching the hull and where possible, be clear of any strakes built into the hull. Rollers should be adjusted to take an even amount of weight. If the weight is not distributed evenly, the boat will be hard to launch and retrieve.

11.4 TRW Series

Position the long bunks inside the strakes close to the keel. The boat must be sitting firm on the inside bunks and front keel roller. Position the shorter bunks to the far outside of the far strake. Adjust the outside bunks up until they are firm on the hull.

11.5 TRP Series, Suits Poly Boats

Boat should sit hard on all keel skids, side skids to be positioned as far out from keel as possible then adjusted to take the minimum amount of weight to steady the boat. If they take too much weight of the hull, then the boat will be hard to launch off the trailer.

11.6 Winch Post

For all Boat fit-ups to trailers, adjust winch post and alignment of winch after all other adjustments are made. Where possible, the winch roller must be positioned on top of the bow eye.

11.7 Axle

Repositioning the axle from its set location is common to gain the desired tow ball weight. You must ensure there is adequate clearance from any fixed or moving parts and or accessories fitted to the trailer while relocating the axle. If the trailer was purchased as part of a package, please contact the boat manufacturer or sales yard before making any axle adjustments. As a guide, 10% of the loaded trailer weight should be on the tow ball. Always refer to your vehicle owner's manual for maximum tow ball weights.

11.8 Tips

On completion of adjusting the trailer and you find the boat does not come up the trailer straight or level, check to following:

Check if all skid, bunks or roller measurements are correct from centre as well as height. Check that the boat sits horizontal in the water, even a very slight lean will bring the boat up to one side. Move fuel tanks, ice box, gear etc, to bring the hull horizontal to the water first.

Is the trailer too deep in the water? Pull up the ramp and retry the retrieval of the boat. Is the trailer not deep enough? Move the trailer down the ramp to a deeper position and retry the retrieval of the boat.

Other factors to consider, position of skids/rollers/bunks adjusted to suit strakes or other hull fittings.

12-- TOWREX WARRANTY POLICY

FOUR (4) Year Warranty Please view the Towrex Trailer warranty policy online: https://www.towrex.com.au/warranty/

ONE (1) Year Warranty Please view the Towrex Trailer warranty policy online: https://www.towrex.com.au/warranty/

Three (3) Month Warranty Please view the Towrex Trailer warranty policy online: https://www.towrex.com.au/warranty/

13-- SERVICE & MAINTENANCE OF YOUR TOWREX TRAILER

Boat trailers operate in a harsh environment and it's important that they be serviced and maintained to prevent failure or incident also ensuring your Towrex Trailer performs to your expectations. The following is a guide to keep your trailer safe and reliable. Using the information within this booklet please be guided by basic maintenance you may be capable of carrying out and maintenance that must be completed by a qualified mechanic or professional. Please contact your purchasing dealer for service or a local boat or vehicle mechanic.

WARNING: Any wheel bearing repairs or maintenance must be completed by a qualified mechanic.

WARNING: Any suspension & axle repairs or maintenance must be completed by a qualified mechanic.

WARNING: Any wheel bearing repairs or maintenance must be completed by a qualified mechanic.

WARNING: Do not overfill the bearing protector. 2-4 pumps of a grease gun is sufficient for maintenance.

WARNING: Always check the coupling for wear or damage before each use. .

- First trip / 100km Check wheel nut torque. Conduct a walk-around visual inspection of the trailer looking for any signs of loose items or movement. Tyre pressure.
- 3 Month / 500km Check wheel nut torque. Wheel bearing inspection. Brake inspection. Boat supporting hardware inspection for loose bolts and/or adjustments. Grease coupling / winch / jockey wheel and other necessary areas. Conduct a walk-around visual inspection of the trailer looking for any signs of loose items or movement. Tyre pressure.
- 6 Month / 2000k Check wheel nut torque. Wheel bearing inspection. Brake inspection. Boat supporting hardware inspection for loose bolts and/or adjustments. Grease coupling / winch / jockey wheel and other necessary areas. Conduct a walk-around visual inspection of the trailer looking for any signs of loose items or movement. Tyre pressure.

• 12 Month or Annual / 5000km – Wheel bearing inspection including regrease or replacement of bearings. Brake inspection including greasing of caliper slides and replacing brake pads. Boat supporting hardware inspection for loose bolts and/or adjustments. Inspect hull / keel rollers and skids / bunks for wear or damage. Grease coupling / winch / jockey wheel and other necessary areas. Conduct a walk-around visual inspection of the trailer looking for any signs of loose items or movement. Starting at the front od the trailer check and tighten any loose bolts/nuts/fittings that may have worked them self loose. Inspect lights and electrical cables. Rotate wheel/tyres and check tyre pressure.

NOTE: Electric Hydraulic braked trailers may require brake services every 6 months depending on brake performance and condition. Please refer to the trailer braking unit individual owner's manual supplied by your Towrex Trailer dealer.

NOTE: Please visit <u>https://www.towrex.com.au/warranty/</u> for full Towrex Warranty Policy.

- Towrex Trailer warranty does not cover general wear & tear on rollers, keel roller, roller pins, skids, Teflon surfaces, brake pads, tyres, bearings and or any part of the trailer subject to wear & tear.
- Towrex Trailer warranty does not extend to any trailer which is found to have been used for commercial purpose. Found to have been overloaded, altered, and modified from standard.
- Towrex Trailer warranty does not extent to any trailers used in/on/for beach launch conditions, situations or locations.
- Towrex Trailer warranty does not cover any failures due to lack of routine and/or necessary maintenance.
- Towrex Trailer warranty extends ONLY to trailers used on sealed roads & does not extend to any trailer used in/on/for OFF-ROAD conditions, situations or locations.

14-TRAILER DETAILS & I.D.

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Trailer Deatails

Make	TOWREX TRAILER	Model	
V.I.N.	6 N N B O A T R L		
D.O.M.	//	Registration No.	

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TARE kg		GVM kg	
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Purchase Date	//	Invoice No.	
Towrex Dealer			
Sales Person:			
Dealer Ph:			
Dealer Em:			
Dealer Stamp:			