

| Trailer Inspection

Trailer Inspection-Electrical System

1. Check that all lights are working and there is no damage to them
2. Check that the reflectors are visible and not damaged
3. Check the electrical connector and wiring for condition and damage



7 Pin Flat Plug & Socket

PIN No.	CIRCUIT	COLOUR
1	Left-hand turn	Yellow
2	Reversing signal	Black
3	Earth return	White
4	Right-hand turn	Green
5	Service brakes	Blue
6	Stop lamps	Red
7	Rear lamps, clearance & side marker lamps	Brown



7 Pin Plug



7 Pin Socket

Trailer Inspection – Axle and Suspension System

Wheel Bearing Inspection

Standard Taper Bearing Inspection

- Jack up the wheel so it is off the ground and support securely
- Spin the tyre and listen for any rumbling
(if there is any rumbling disassembly and inspection is required)
- Check for excessive play in by rocking the top and the bottom of the wheel – A small amount of play is allowed provided there is no rumble



Trailer Inspection – Axle and Suspension System - Cont.

1. Remove the Hub caps and inspect the grease condition and colour- Should be blue, green or red.
2. Check that the wheel hubs, nuts and studs are in good condition.
3. Check the wheel nuts are tight – If not back off and retorque.
4. Check the suspension springs, shackle pins, bushes and rockers – You are looking for broken springs, missing or damaged shackle pins and play between bushes pins and spring eyes.
5. Inspect axles are straight and not dented or damaged.
6. Inspect all tyres for tread depth, wear, and damage to sidewalls. – note minimum trad depth in NZ is 1.5MM
7. Inspect the Jockey wheel for correct operation and damage.



Braking System

1. Check brake fluid reservoir is full and the fluid is serviceable.
2. Inspect the brake discs for rust, cracking, Leaks and security (leaks can be seen by dust accumulation around the leak)
3. Inspect the brake callipers and pads for damage leaks and pad wear
4. Inspect the brake controls and linkage – this includes insuring the coupler can slide freely and is greased
5. Check the park brake operation and that the wheels correctly brake when the brake is applied.



Body Structure

1. Check the condition of the mudguards and that they are secure
2. Check the tow coupling for wear and security – this should also be checked on the tow vehicle for the correct ball and coupler set up (1 7/8 or 50mm Ball) as well as being adjusted to remove excessive play.
3. Check safety chains and shackles – Note for trailers over dual safety chains are required and must be rated and marked
4. Check the deck condition and security. – Noting damage and ensure it is not insecure
5. Inspect the tailgate/ ramps for damage, security, operation, cracks.
6. Inspect complete trailer structure looking for cracks, dents, unusual bends or twisting.



| Trailer Repair

Repairs - Wiring

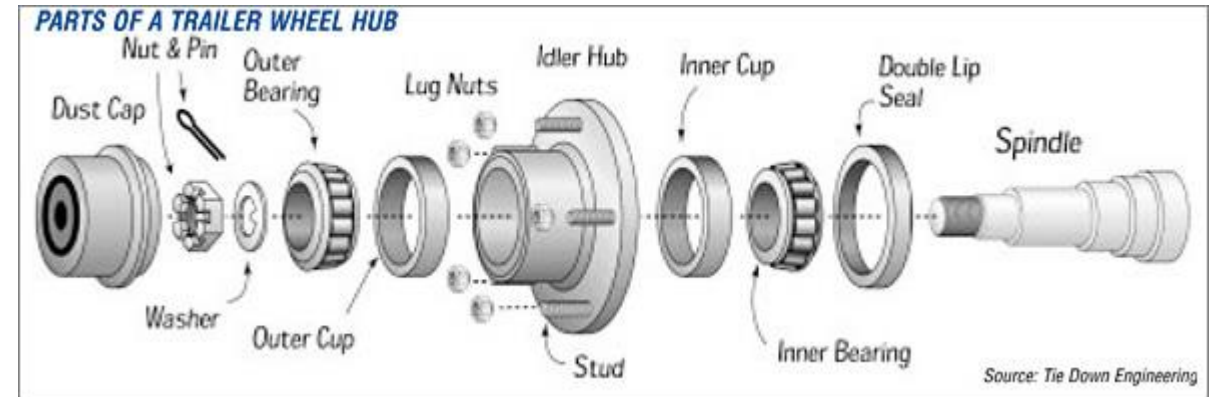
All wiring repairs need to be performed to a high weatherproof standard with all joins covered with heat shrink to protect from water and dirt entry



Repairs – Bearing Adjustment and Replacement

Watch the following videos for the correct replacement procedure- Consult the bearing manufacture for correct specifications

<https://youtu.be/81zHRycNa8s>



Repairs- Wheel Bearing Grease

Only the correct wheel bearing grease should be used for wheel bearing.

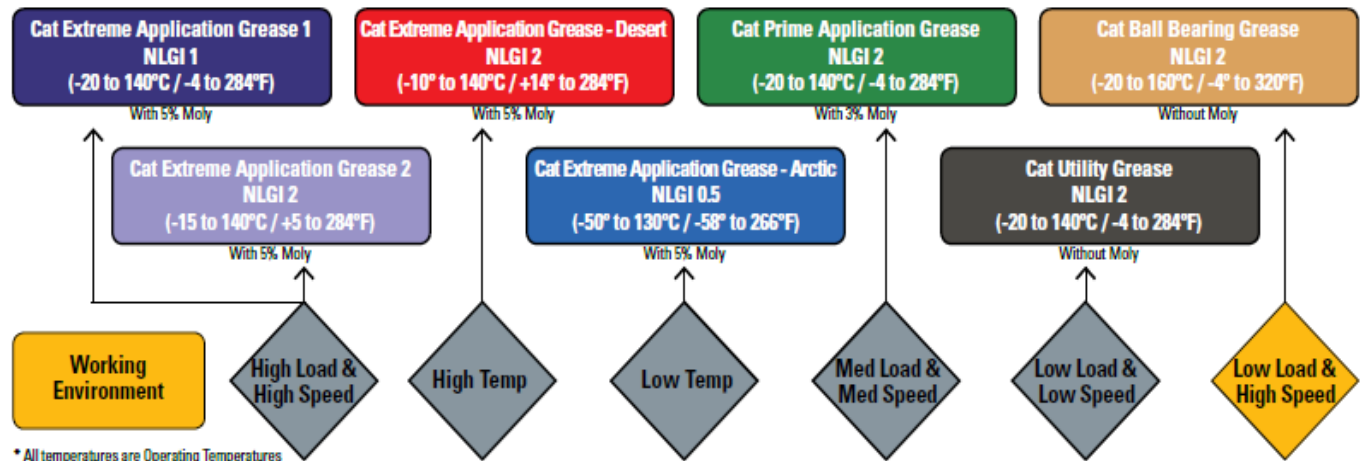
This should be Caterpillar Ball Bearing Grease:

- 454-0291 390g Cartridge
- 454-0292 450g Cartridge

DO NOT USE a standard Moly or multipurpose grease as this is designed for impact and not for high load



Grease Selection Guide



* All temperatures are Operating Temperatures

Repairs – Brakes/Hubs

If a trailer brakes have been lock on overheated both the trailer brakes and wheel hubs need to be disassembled and inspect.

- The brake callipers need to be removed and inspected for damage to the pistons and seals.
- The bearings need to be thoroughly inspected and packed with new grease.
- The stub axles need to be inspected for cracking and damage.
- The hub seals need to be replaced.
- The brake fluid needs to be replaced.

