



1450kg Single Drum Trailer User Instructions



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THANK YOU FOR CHOOSING A RITELITE (SYSTEMS) LTD PRODUCT

This instruction booklet has been written to help you safely operate and look after your 1450kg Cable Drum Trailer. Please read the manual thoroughly to ensure that you are fully aware of the safety measures you need to take before use of the machine.

INFORMATION

The design of this machine, when used according to the instructions, minimises health and safety risks.

All work cannot be totally risk free but to avoid these risks it is important that:

All staff are suitably trained to carry out the required tasks.

Appropriate equipment and tools are provided.

Those supervising the work have devised an effective safe system of work. All in a position of responsibility within the company ensure regulations are drawn up and followed by all personnel.

The instruction book contains important information of which all users must be aware. The areas of particular importance have the following headings:

WARNING. Information that warns you of the risk of serious personal injury or threat to life if instructions are not followed.

CAUTION. Information that describes how to prevent damage to the machine and equipment and how to avoid situations that risk injury.

NOTE. Advice regarding maintenance and operation of the machine.

GENERAL SAFETY PRECAUTIONS

Personnel safety

1. Make yourself aware of all the instructions in this manual. Be sure you understand all the instructions and warning signs that are fixed on and around the machine. Be sure you fully understand these and if in any doubt, get answers before starting work.
2. Do not work with any equipment or machinery if you are, or think you may be, under the influence of alcohol, strong medication, sedatives or other drugs that could make you less alert or affect your judgement.
3. Ensure that hair or clothes cannot become trapped or tangled in moving parts or controls.
4. Wear suitable safety gloves to protect you from physical injury or chemical damage.
5. Wear safety goggles whenever there is a risk of flying particles, splinters, dust or other objects that could damage your eyes, and when safety regulations demand it. 'Look after your eyes'.
6. Wear safety helmet and safety shoes when appropriate or when required by site regulations.
7. Wear hearing protection in areas with a high noise level.

Safety in the work place

8. Keep your working area tidy and clean.
9. Use barriers or cones to keep unauthorised personnel out of the work area. Always be aware of those working around you.
10. Keep all surfaces clean, dry and free from oil or grease.
11. Do not stand underneath or allow anyone else to stand underneath any raised equipment or suspended loads.
12. Check the safe working load (SWL) of any pulling or lifting equipment and ensure that any safety factor is allowed for.

Equipment safety

13. Before towing mobile equipment check that the brakes and road lights work satisfactorily. Make sure that the jockey wheel and supports are raised high enough to permit safe transport. Check for loose parts that could fall off during transport and be a risk to other road users.
14. Check that any prohibition, warning or information signs are not changed, damaged, removed or obscured.
15. Check that any supports and securing devices are properly in place. Follow the instructions for setting up the equipment and securing it as appropriate. When setting up mobile equipment ensure that the ground is firm and the machine is safely levelled up.

16. Check over the equipment each time before use to make sure that no parts are damaged or show signs of possible damage and repair or replace before operation begins. Check that all guards and safety equipment is correctly installed and in satisfactory condition.
17. Before any operation begins, check round the equipment to ensure nothing is inside, under or too near the equipment such as tools, animals, etc. When starting and operating the equipment always be watchful for signs of something going wrong. Check for visible defects, unusual noises or smells that could be a warning of a fault. Stop the equipment immediately if you have any suspicion of a fault.
18. No untrained person shall start or operate any equipment without the supervision of a trained operator
19. Never leave working equipment unsupervised.
20. Always stop the machine before carrying out maintenance.
21. All inspections, maintenance, lubrication and adjustments should be carried out with care and following the manufacturer's instructions.

TECHNICAL DATA

CAPACITY

Maximum Combined Pulling Force	2000 kg
Maximum No. of Drums:	1
Maximum Drum Diameter:	2.000 m
Maximum Drum Width:	1.000 m
Maximum Drum Weight:	1450 kg

TRAILER DIMENSIONS

Length:	3580 mm
Width:	2070 mm
Height:	1760 mm
Nett Weight:	450kg
Hand Winch:	K2550 work winch
Cable Drum Shaft Diameter:	70 mm
Cable Drum Shaft Brake:	Mechanical Disc Brake
Wheel Specs:	14 x 5.5 JJ, 5 Stud with 6" PCD
Tyres:	195 R14LT.
Brakes:	Knott 250x40
Mudguards:	Plastic
Coupling:	Knott KRV20
Lighting:	Purpose designed lighting units at rear, comprising of side, brake, indicator, fog & number plate lights. Front marker lights mounted in front of the mudguards.
Hitch:	40mm DIN eye or 50mm Ball

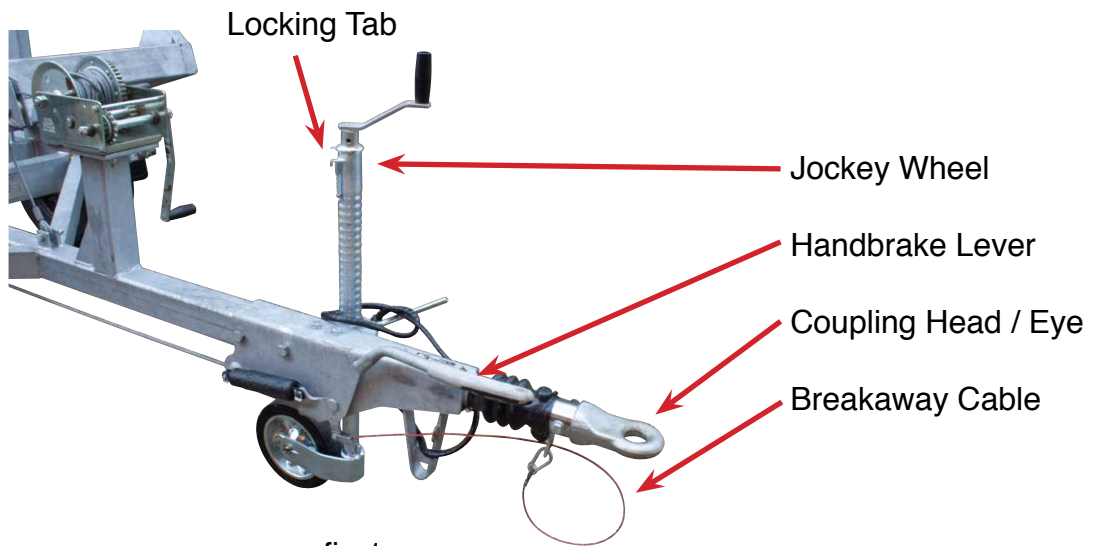


fig 1

HANDLING

Hitching Adjust the jockey wheel so that the coupling head or eye is at the right height and is aligned with the hitch point of the towing vehicle. Reverse the towing vehicle to the trailer or move the trailer to the vehicle hitch.

- If the coupling is fitted with an eye remove the retaining pin from the vehicle hitch point, manoeuvre the eye into the hitch point and reinsert the retaining pin ensuring it is locked in place according to the manufacturer's instructions.
- If the coupling is fitted with a ball head. Open the head by pulling the lever firmly upwards. may be necessary to release the safety catch if fitted, Place the head over the vehicle ball hitch and release the handle. Ensure that the handle returns to its original position

Plug the lighting cable into the socket of the vehicle and make sure the tabs on the socket cover lock the plug in place. Connect the red break-away safety cable (fig2) to the towing vehicle as shown noting that the cable should be looped through a suitable anchor point and clipped back onto itself. This safety cable will cause the trailer brakes to be applied should the trailer break loose from the towing vehicle.

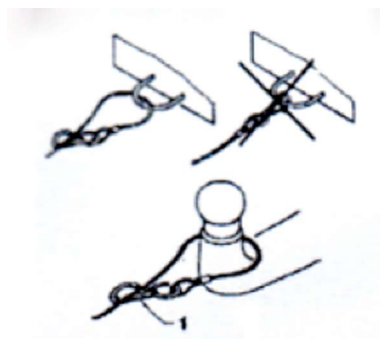


fig 2

Once the trailer is securely attached to the towing vehicle, crank the jockey wheel up to its highest point so that the locking tab locates in the serrated shaft to prevent the bottom shaft rotating undone. Move the locking pin into the recess and clamp securely. Ensure that it does not obstruct the brake rod. Release the parking brake by pushing the handbrake lever to its lowest position.

CAUTION: Always check the loads on the vehicle hitch before towing. Under no circumstances should you exceed the maximum permissible loads on the vehicle hitch and trailer coupling. Nose weight must not exceed 75kg and the trailer brake force 1600kg. Avoid overloading the ball hitch as this will impair braking and driving characteristics.

Unhitching Crank down the jockey wheel until the trailer weight has been transferred from the towing vehicle hitch point to the jockey wheel. Ensure that the parking brake has been applied by lifting the handbrake lever.

CAUTION: The handbrake is spring assisted hence care should be taken to prevent injury from the powerful spring.

Disconnect the red break away safety cable and lighting cable.

- If the coupling is fitted with an eye, remove the retaining pin from the vehicle hitch point. Drive the vehicle forward.
- If the coupling is fitted with a ball head, open the head by pulling the lever firmly upwards. It may be necessary to release the safety catch if fitted. Lift the coupling head off the vehicle hitch.

TOWING

CAUTION:

Extreme care must be taken when towing a loaded drum trailer. The weight of the drum and the height at which it is carried creates a high centre of gravity. This makes the trailer easy to overturn while cornering on soft or unstable ground or at excessive speed on the road. It is also essential that the drum is secured using the retainer or drum collars and not allowed to slide along the shaft.

OPERATING INSTRUCTIONS

WARNING:

Trailer handbrake must be applied and trailer must remain hitched to a tow vehicle or suitable anchor for all operations i.e. loading drums, dispensing cable and unloading drums. This is necessary to provide stability and a safe working condition.

WARNING:

All areas around the trailer should be treated as Danger Zones.

WARNING:

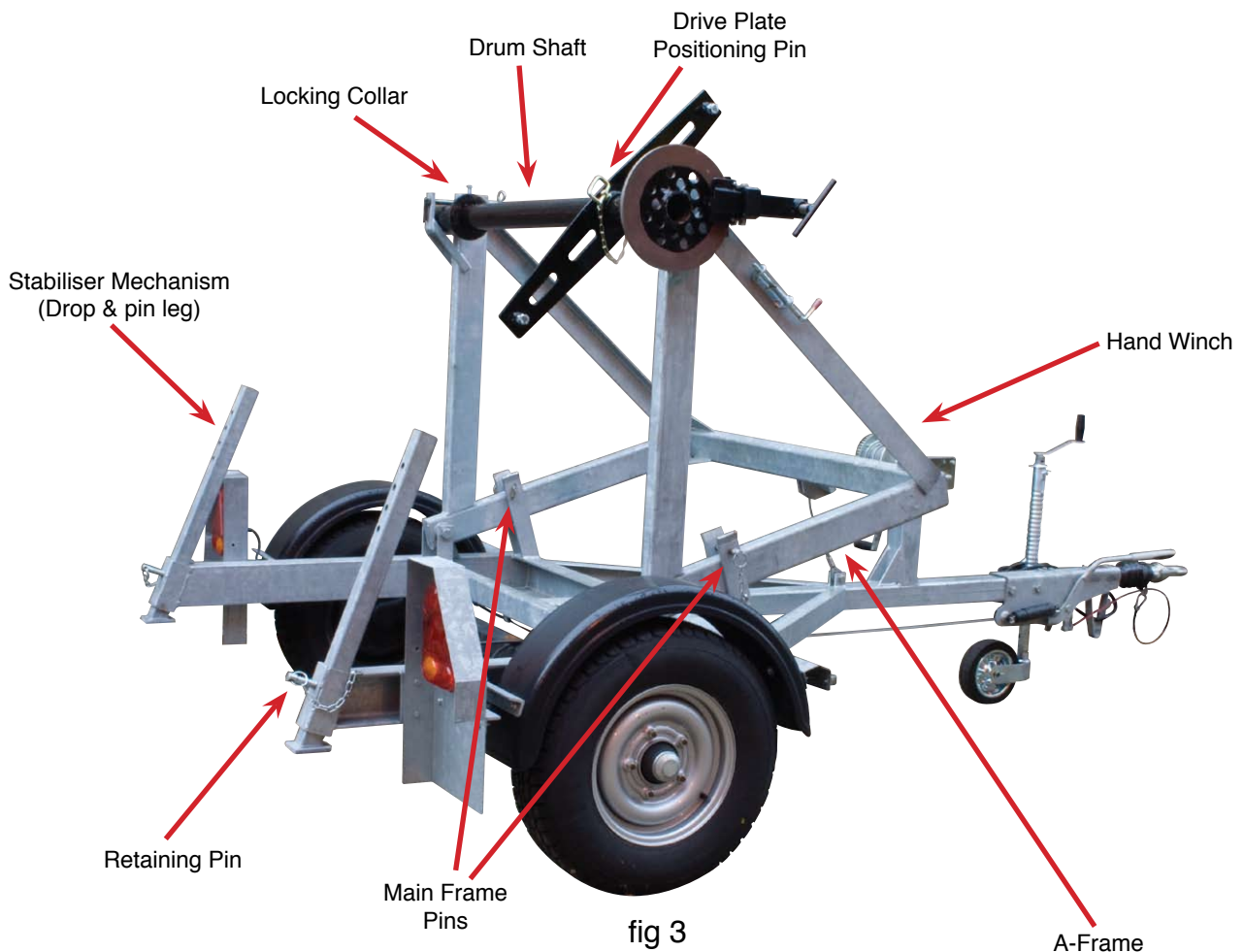
This equipment should not be used when there is a possibility of lightning.

LOADING DRUMS ONTO TRAILER

Refer to Figures 3 and 4 for item names and locations.

The 1450Kg, Single Drum Trailer is designed for one-man operation.

1. Ensure the trailer is on level ground
2. The trailer must remain hitched to the towing vehicle or the hitch suitably anchored..
3. Drop the legs to suitable height and lock into position using the retaining pins.
4. Remove the mainframe pins



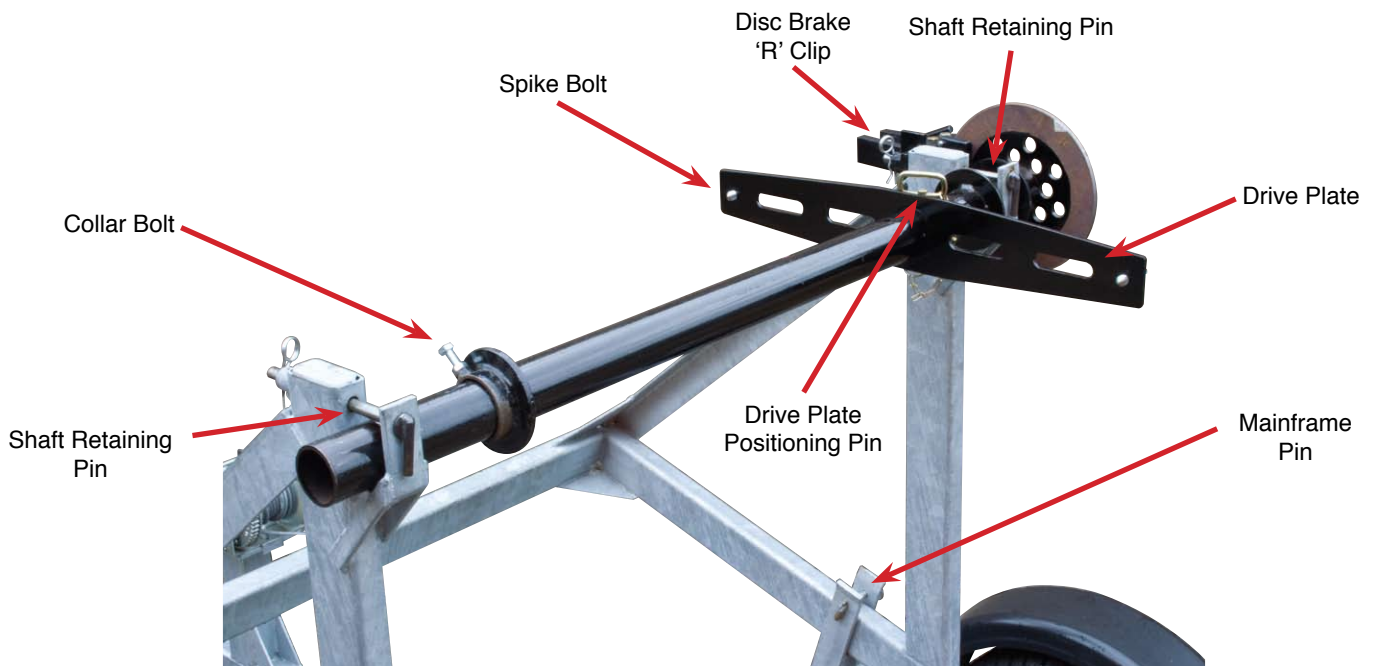


fig 4

CAUTION: DANGER OF MOVING PARTS. Do not place limbs on or near the 'A' frame when it is being rotated for loading or unloading.

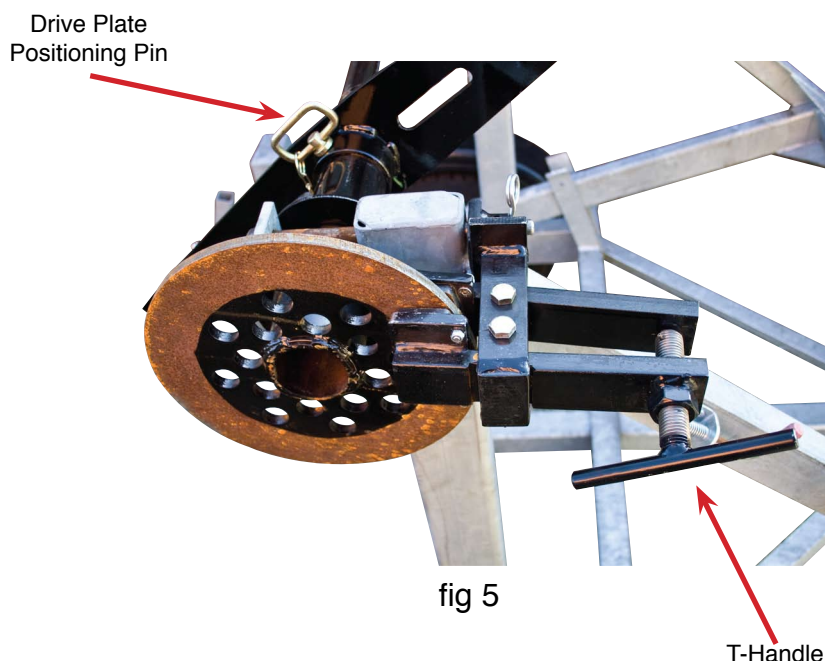
5. Release sufficient cable from the hand winch to allow the A-Frame past centre of gravity and push the A-Frame backwards. The winch can then be used to lower the drum shaft towards the ground.
6. Remove the disc brake 'R' clip and rotate the disc brake mechanism away from the disc.
7. Remove the shaft retaining pins and extract the shaft from the bearing cups.
8. Remove the locking collar by loosening the collar bolt.
9. Unscrew the spike bolts on the drive plate.
10. Place shaft through cable drum so that the drive plate is positioned against the drum. The drive plate is located on the drum shaft in one of three positions by the drive plate positioning pin. Select a location hole that positions the drum centrally on the drum shaft.
11. Refit the locking collar onto the shaft and secure with collar bolt as tightly as possible before re-tightening the spike bolts into the sides of the drum. Please note the disc brake mechanism is only as effective as the connection between drum, locking collar and drive plate.
12. Place shaft complete with drum into the bearing cups, rotate brake mechanism to engage disc and refit 'R' clip.
13. Turn hand winch to raise A-Frame so that the cable drum is just clear of the ground.

14. Refit the drum retaining pins.
15. Continue to winch the A-Frame towards maximum height.
WARNING: At this point, the the weight of the drum goes over-centre and the drum will fall into it's working position. Keep well clear of the A-Frame as it falls into position.
16. Fit main frame pins.
WARNING: Double check that the main frame pins are securing the A-Frame in position otherwise applying tension with the disc brake will pull the drum back over-centre.

WARNING: At no time is the operator or other personnel to stand under or near a load being lifted by the trailer.

DISPENSING CABLE

- In order to ensure safe operation of the trailer unit, the following points must be adhered to.
- Position trailer as level as possible.
- Trailer to remain hitched to tow vehicle or suitable anchor.
- Rear stabiliser legs used but road wheels must remain in contact with ground to provide braking.
- Trailer hand brake applied.
- Trailer positioned in line with first stringing pole and cross arm to ensure direct feeding of conductor from drum without snagging
- Trailer placed sufficient distance from first stringing pole to reduce the approach angle of the cable to the cross arm.
- Ensure the shaft brake is off before pull commences and apply brake as necessary using T-Handle (shown in fig 5) as pull continues. Clockwise to increase braking, counterclockwise to reduce braking.



MAINTENANCE

It is essential that your machine receives regular attention to ensure that it remains in peak condition. All the road running gear i.e. brakes, lights, mudguards, tyres etc. are statutory requirements and as such must be maintained in good condition.

The machine must be subject to a Lifting Operations and Lifting Equipment Regulations (LOLER) examination on at least an annual basis. This should be carried out by a specialist.

Full details of the minimum servicing requirements are given on the following overall maintenance schedule

All maintenance should be carried out by a skilled and competent person.

DAILY CHECKS – OPERATOR

1. Inspect the trailer for any signs of damage Check for any missing or loose bolts and replace or tighten as necessary Report any problem including any damage and in extreme cases take trailer out of service.
2. Ensure that the tyres pressures are correct (66psi). Check for wear and sidewall damage.
3. Check wheel bearings for lateral movement.
4. Check for the correct operation of the rear light units and front markers mounted in front of the mudguards.
5. Retaining pins should be checked for damage and that spring clips are present and in working order.
6. Drive plate and locking collar should be checked for good order and easy operation of the screw studs and that all studs and clamping bolts are present.
7. Drum shaft bearing cups should be greased.

MONTHLY CHECKS – OPERATOR

1. Lubricate the cable drum A-Frame cradle pivot points with oil.
2. Check wheel bearings for lateral movement.

SIX MONTHLY CHECKS – WORKSHOP

1. Visually inspect all fixings for signs of looseness and rectify as necessary.
2. Check and ensure the correct operation of the hand winch unit. Ensure that the loadpressure brake is functioning by verifying that under tension the ratchet is effective and does not allow the crank to unwind freely. The following should be oiled: all shaft bushes, intermediate pinion needle bearing and drum hub. The following should be greased: drum toothed wheel rim. Crank mounting acme thread. NB: The brake pads and disc must not come into contact with oil or grease.
3. Check the condition of the steel cable on the hand winch unit. Replace as necessary.
4. Check the thickness and condition of the disc brake pads on the cable drum cradle. Replace as necessary.
5. Remove wheel brake drums and examine drums and brake shoes for wear and damage. Repack wheel bearings with grease.
6. Ensure the correct operation of the trailer brakes and adjust as necessary. Check wear and condition of brake shoes and replace as necessary.
7. Check the condition of the wiring on the trailer lighting system. Ensure that any damaged cables are replaced.

FIVE YEARLY CHECKS – WORKSHOP

1. It is recommended that the hand winch unit brake discs and ratchet wheel are replaced every 5 years. Graphite paste should be applied when replacing these parts.

STAGES OF DRUM LIFTING

