



**PLEASE READ THESE INSTRUCTIONS  
CAREFULLY BEFORE OPERATING !**

Thank you for choosing a Clydesdale product.

We want you to be satisfied with your 1300kg Cable Drum Trailer. This instruction booklet has been written to help you operate and look after it safely. We ask you to read the manual thoroughly before you start using the machine so that you are aware of the safety measures you need to take when using it.

#### **GENERAL.**

This equipment has been carefully designed and developed to eliminate health and safety risks

There are certain risks when working with wires and pylons and to avoid these it is important that:

- Instructions are studied and observed
- Personnel are regularly trained in maintenance and safety
- The appropriate equipment and tools are available
- The owner and work supervisors take responsibility for ensuring that an effective safety programme and regulations are drawn up and followed by all personnel.

Our instructions contain important information which all users must be aware of and understand before they use the equipment. For your sake and the sake of others please take special notice of the items/sections with the following headings.

#### **WARNING.**

**Important information that warns you of the risk of serious personal injury or threat to life if instructions are not followed.**

#### **CAUTION.**

**Important information that describes how to prevent damage to the machine and equipment or how to avoid a situation that could cause personal injury.**

#### **NOTE.**

**Advice regarding operation, care and maintenance of the machine and equipment.**

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## **SAFETY RULES.**

### **GENERAL SAFETY PRECAUTIONS**

#### **Personnel Safety**

1. Read and remember all safety warnings, precautions and directions in the operation and maintenance instructions. Read and learn the meaning of all signs that are on and around the equipment. If you are in any doubt, make sure you get answers to all your questions before starting work.
2. Do not work with machinery or equipment if you are under the influence of alcohol, strong medication, sedatives or other drugs that could make you less alert or affect your judgement.
3. Take the necessary precautions to avoid loose hair or clothes becoming trapped in moving parts or controls.
4. Whenever possible wear safety gloves to protect your hands and fingers from cuts, grazes, burns and solvents.
5. Always wear a 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. Always wear a safety helmet and safety shoes when work requires it.
7. Always wear hearing protection in areas with a high noise level.

#### **Safety in the work place**

8. Keep your working area clean and uncluttered
9. Keep unauthorised personnel away from the working area. Always keep a good check on who is present.
10. Surfaces that you touch with your hands or feet must be kept clean, dry and free from oil or grease.
11. Store parts and tools in a place appointed for that purpose when they are not in use.
12. Do not stand underneath or allow anyone else to stand underneath any raised or suspended equipment.
13. Find out the weight limits of lines and lifting equipment and clearance they require when in use.

#### **Equipment safety**

14. Warning signs, prohibition signs and information signs must not be obscured, changed, damaged or removed.
15. Before setting up mobile equipment make sure that the ground is firm and level. Check that supports and securing devices are safely in place. Follow the instructions for securing and setting up the equipment where appropriate.
16. Before moving mobile equipment you must check that the brakes and road lights work satisfactorily. Make sure that supports are raised high enough above the ground to permit safe transport. Check that there are no loose parts that could fall off during transport.
17. Check the components of the equipment each time before use to make sure that no parts are damaged or suspected of being damaged. Repair or replace damaged parts or parts that are suspected of being damaged. Repair or replace damaged parts before starting or operating equipment. Use only original spare parts.
18. Before starting or operating the equipment make sure that no person, animal, tool or other foreign object is inside, on, under or near the equipment. Check that all protection and safety equipment is correctly installed and in satisfactory condition.
19. Do not let untrained personnel start or operate any equipment without supervision by a trained operator.
20. Never leave the equipment unsupervised.
21. When starting and operating the equipment watch out for defective instruments, visible defects, smells or unusual noises that could be a warning of a fault. Stop the equipment immediately if you suspect a fault.
22. Carry out all inspections, maintenance, lubrication and adjustments very carefully and in accordance with the manufacturers recommendations. Always stop the machine before carrying out maintenance.

### **Safety from fire and flammable substances**

23. Store highly flammable, flammable and hazardous substances in a safe place in the appropriate containers. These must be clearly marked according to the relevant regulations.
24. Do not permit smoking or naked flame in the vicinity of fuel and oil tanks or other flammable substances.
25. Switch off all engines when topping up oil or fuel. Follow the regulations and recommendations that apply to handling these substances.
26. Never start a diesel or petrol engine in a closed space unless it is properly ventilated. Harmful gases can kill.
27. Never use highly flammable and/or flammable substances such as petrol, paraffin or diesel to clean parts. Always use low flammability solvents intended for cleaning.

### **Safety with hydraulic systems**

- 28.** Do not carry out maintenance on components of the hydraulic system without first depressurising the system.
- 29.** Do not carry out any checks on the oil system without first depressurising the system. Oil under pressure can be dangerous if the pressure is released incorrectly. Oil can get very hot during operation. Wait until the system has cooled down before starting work.
- 30.** Do not disconnect a hydraulic cylinder from its couplings until the system has been depressurised.
- 31.** Do not operate a pressurised system with worn or damaged hoses, valves and seals. Replace damaged components before operating the system again.
- 32.** Do not try to remove hydraulic cylinders or other hydraulic equipment unless you are trained to do such work.
- 33.** Never adjust hydraulic system pressure settings above the recommended values.
- 34.** Follow the manufacturers recommended inspection and maintenance instructions for pressurised systems to make sure that safe conditions exist during operation.

## **TECHNICAL DATA**

### **CAPACITY**

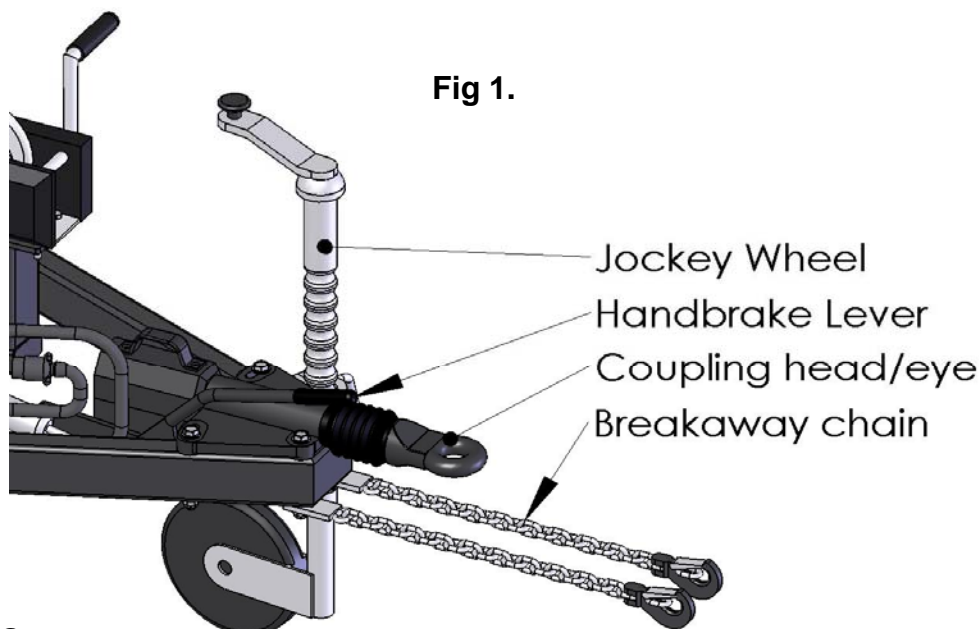
Maximum Combined Pulling Force :	2000 kg
Maximum No. of Drums :	1
Maximum Drum Diameter :	2.000 m
Maximum Drum Width :	1.000 m
Maximum Drum Weight :	1300 kg

### **TRAILER DIMENSIONS**

Length :	2906 mm
Width :	1992 mm
Loaded Height:	2600 mm
Minimum Ground Clearance :	285 mm
Hand Winch :	AL-KO 900kg Safety Winch
Cable Drum Shaft Diameter :	70 mm
Cable Drum Shaft Brake :	Mechanical Disc Brake
Wheel Specs :	5 ½ Jx14, 185 R14, 5 x 140 PCD
Brakes :	Knott 250x40
Mudguards :	Galvanised steel mitred
Coupling :	Knott KFG20
Axle :	Avonride 1800kg
Lighting:	Purpose designed lighting pods to each mudguard gives brake,indicator side and front running light. Rear fog light and number plate lamp also fitted.
Hitch :	40mm DIN eye, 76mm NATO eye or 50mm Ball
Tow Hitch Height :	21 "



## TOWING AND HANDLING



### HANDLING

**Hitching** – Adjust the jockey wheel so that the coupling head or eye is at the right height for connection to the hitch point of the towing vehicle. Reverse the towing vehicle towards the trailer or pull the trailer up to the hitch point.

- 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 re-insert 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. It 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.

Connect the lighting cable to the socket of the vehicle ensuring the cover tabs lock the plug in place. Connect the red safety cable (fig2) to the towing vehicle as shown noting that the cable should be looped over or through a suitable anchor and clipped back on to itself. This safety cable will ensure that the trailer brakes are applied should the trailer break loose from the towing vehicle.

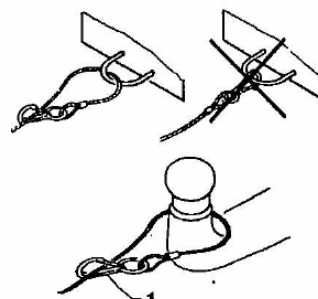


Fig 2



Breakaway chains when fitted should be clipped onto suitable sturdy anchors on the towing vehicle.

Once the trailer is securely attached to the towing vehicle, crank the jockey wheel up to its highest position such that the locking tab locates in the serrated shaft stopping the bottom shaft rotating. Insert the R-clip and clamp securely. Ensure that it does not obstruct the brake rod. Release the parking brake by pushing the handbrake lever to its down-most position.

**CAUTION: Always check the loads on the vehicle hitch before driving. Under no circumstances should you exceed the maximum permissible loads on the vehicle hitch, trailer coupling (75kg) and trailer brake (1600kg). Avoid overloading the ball hitch as this will have a negative impact on 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 powerful spring forces.**

Disconnect the breakaway chains, 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 on the road. The high centre of gravity due to the weight of the drum and the height at which it is carried makes the trailer easy to over-turn while cornering if excessive speed is used. It is also essential that the drum is secured using the retainer and not allowed to slide from side to side 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 ie. loading drums, dispensing cable and unloading drums. This is necessary to provide stability and a safe working condition.

**WARNING:** The CLY 760 1300, Single Drum Trailer is designed for one man operation.

**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.

1. Ensure the trailer is on level ground.
2. Engage the stabiliser mechanisms at the rear of the chassis:

On models with drop & pin stabiliser legs, drop the legs to suitable height and lock into position using the retaining pins.

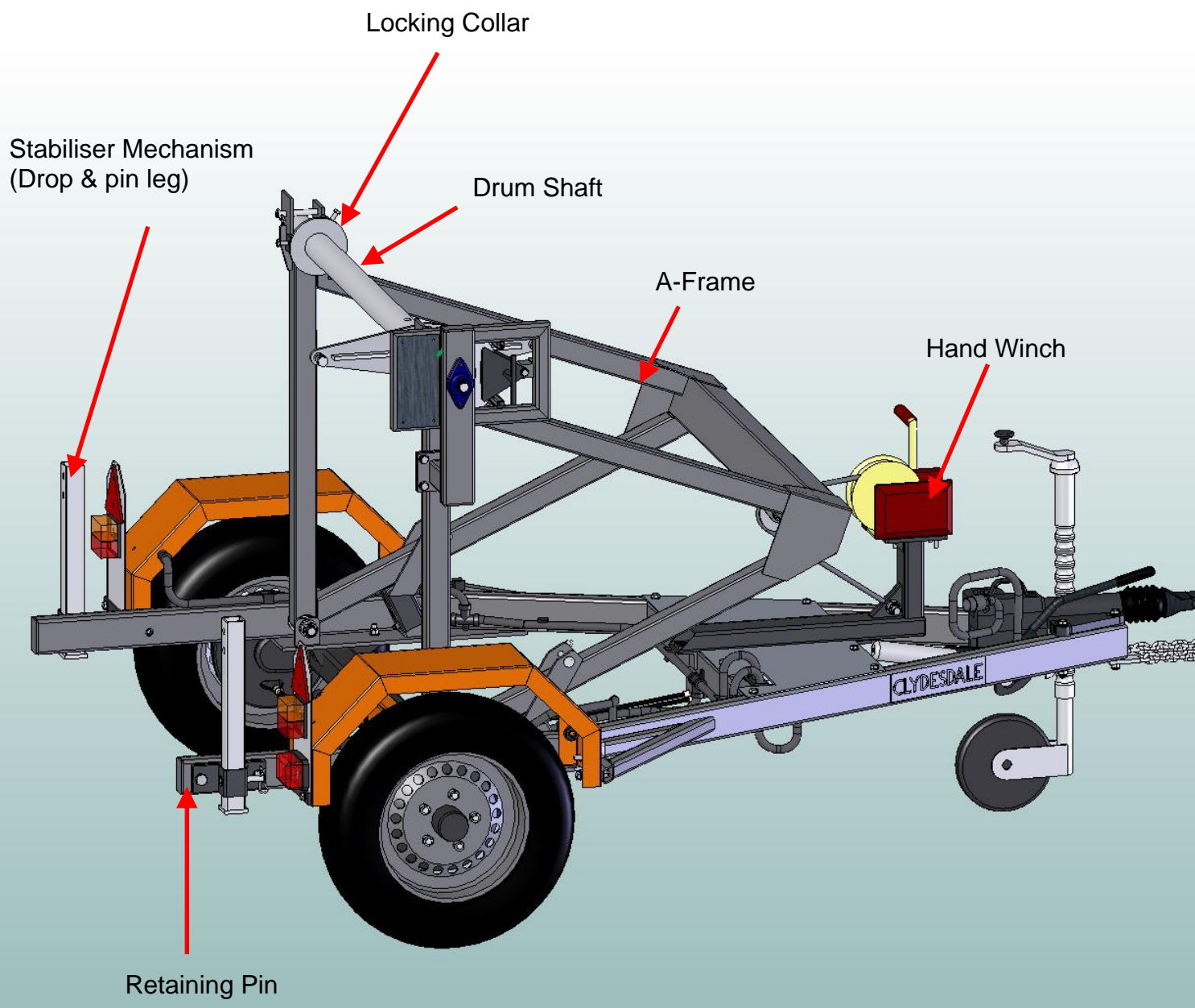
On models with propstands, drop and clamp the propstands at a suitable level then screw down the legs.

**CAUTION:** For models with stabiliser legs/propstands, ensure both legs support the weight but do not lift road wheels clear of ground to prevent excessive bending stresses in trailer chassis.

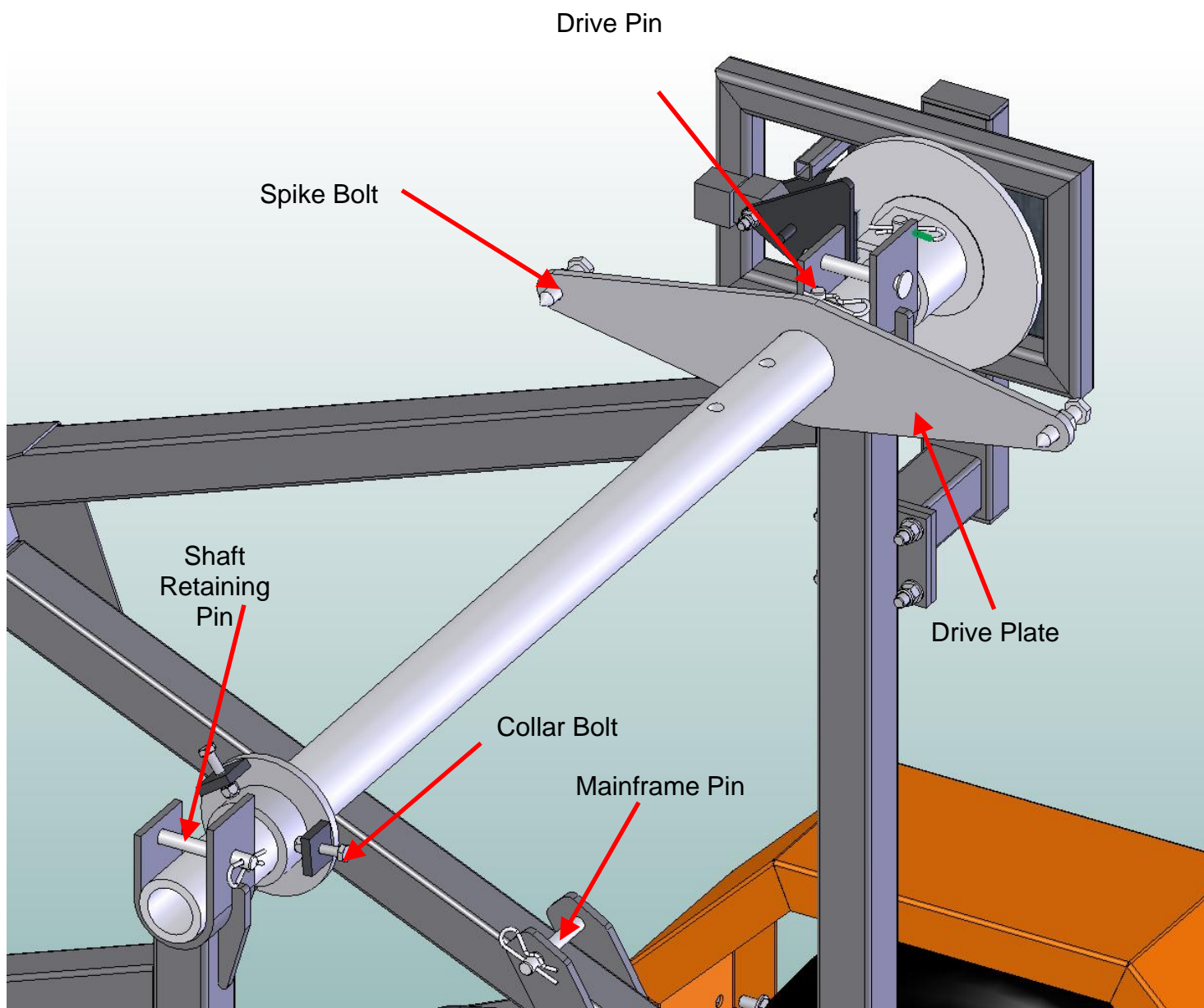
3. Remove the mainframe pins.

**CLY 760 1300**  
**1300kg Cable Drum Trailer**  
**User Instructions**

**CLYDESDALE**  
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**Fig 3**



**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.**

4. Use the hand winch to rotate the A-Frame backwards lowering the drum shaft towards the ground.
5. Remove the brake drive pin and slide the drum shaft out of the brake coupling sufficient to clear the coupling and no more.
6. Remove the shaft retaining pins and extract the shaft from the bearing cups.
7. Remove the locking collar by loosening the collar bolts.
8. Retract the spike bolts.
9. Place shaft through cable drum so that the yoke/drive plate will be positioned on the disc brake side.
10. Re-fit the locking collar onto the shaft and secure with collar bolts 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 yoke/drive plate.
11. Place shaft complete with drum into the bearing cups and secure with retaining pins.
12. Turn hand winch to raise A-Frame so that the cable drum is **just clear** of the ground.

**CAUTION: Loads must never be lifted more than is sufficient to clear the ground before the drum shaft is mated to the brake coupling as this is the only means by which the shaft is held in the frame.**

13. Slide the drum/shaft assembly sideways to connect with the brake coupling. Replace the retaining pin and the safety R-clip.
14. Continue to winch the A-Frame into its working position and replace the main frame pins.

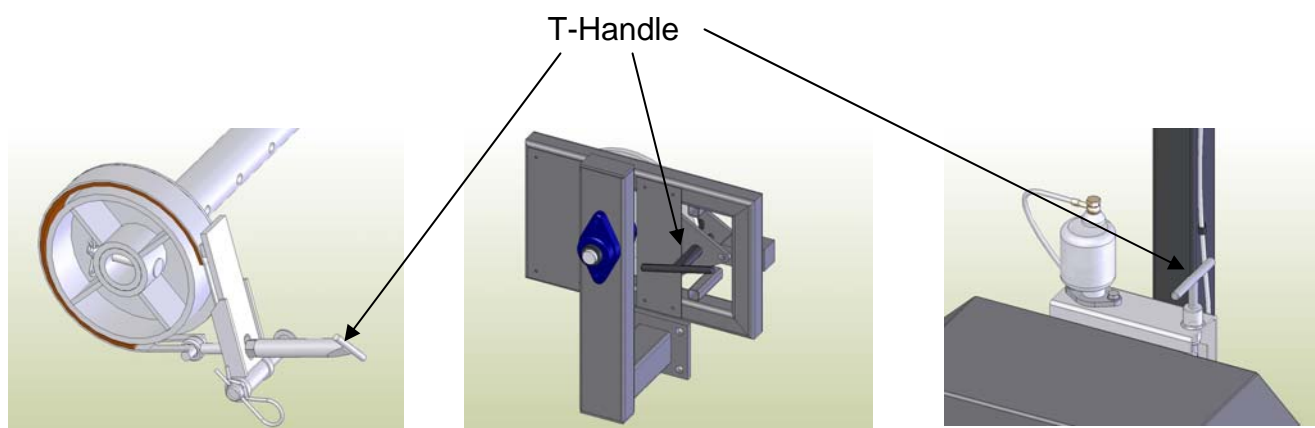
**WARNING: At no time is the operator or other personnel to stand under or near a load being lifted by the trailer.**



## **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, counter-clockwise to reduce braking.



**Fig 5**

## **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 skilled and competent personnel.

Where adjustments are to be made to electrical equipment, qualified electrical personnel should be used.

### **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 (65psi).
3. Check for the correct operation of the lighting mounted on mudguards.
4. Retaining pins should be checked for damage and that spring clips are present and in working order.
5. 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.
6. Drum shaft bearing cups should be greased.



## **MONTHLY CHECKS - OPERATOR**

1. Models with hydraulic disc brake: check the disc brake callipers, hoses and master cylinders for external leaks and damage. Check the level of hydraulic oil in the master cylinder reservoir. Use only brake fluid as recommended.  
Models with drum brake: check brake band for correct operation ensuring the tube nut moves freely.  
Models with mechanical disc brake: check for correct operation ensuring that calliper wedges are free to move and not restricted by the pivot bolt.
3. Lubricate the cable drum A-Frame cradle pivot points with oil.
4. Models with prop stand stabiliser legs: check the stabiliser screw legs for correct operation and lubricate.
5. Models with rail wheel attachments: check for correct operation of the mechanism. Inspect attachments for visible cracks or bending.

## **SIX MONTHLY CHECKS - WORKSHOP**

1. Visually inspect all fixings for signs of looseness and rectify.
2. Check and ensure the correct operation of the hand winch unit:  
Ensure that the load-pressure 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 discs 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. Remove tyres and examine for wear and damage. Repack wheel bearings with grease.
5. Check the thickness and condition of the disc brake pads (or band brake lining) on the cable drum cradle. Replace as necessary.
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 trailers 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.

#### **RECOMMENDED LUBRICANTS**

Disc braking system - Lockheed Dot 4 Brake Fluid  
Graphite Paste: Kluber Company, Wolfracoate 99113

## **NOTES / SERVICE HISTORY**



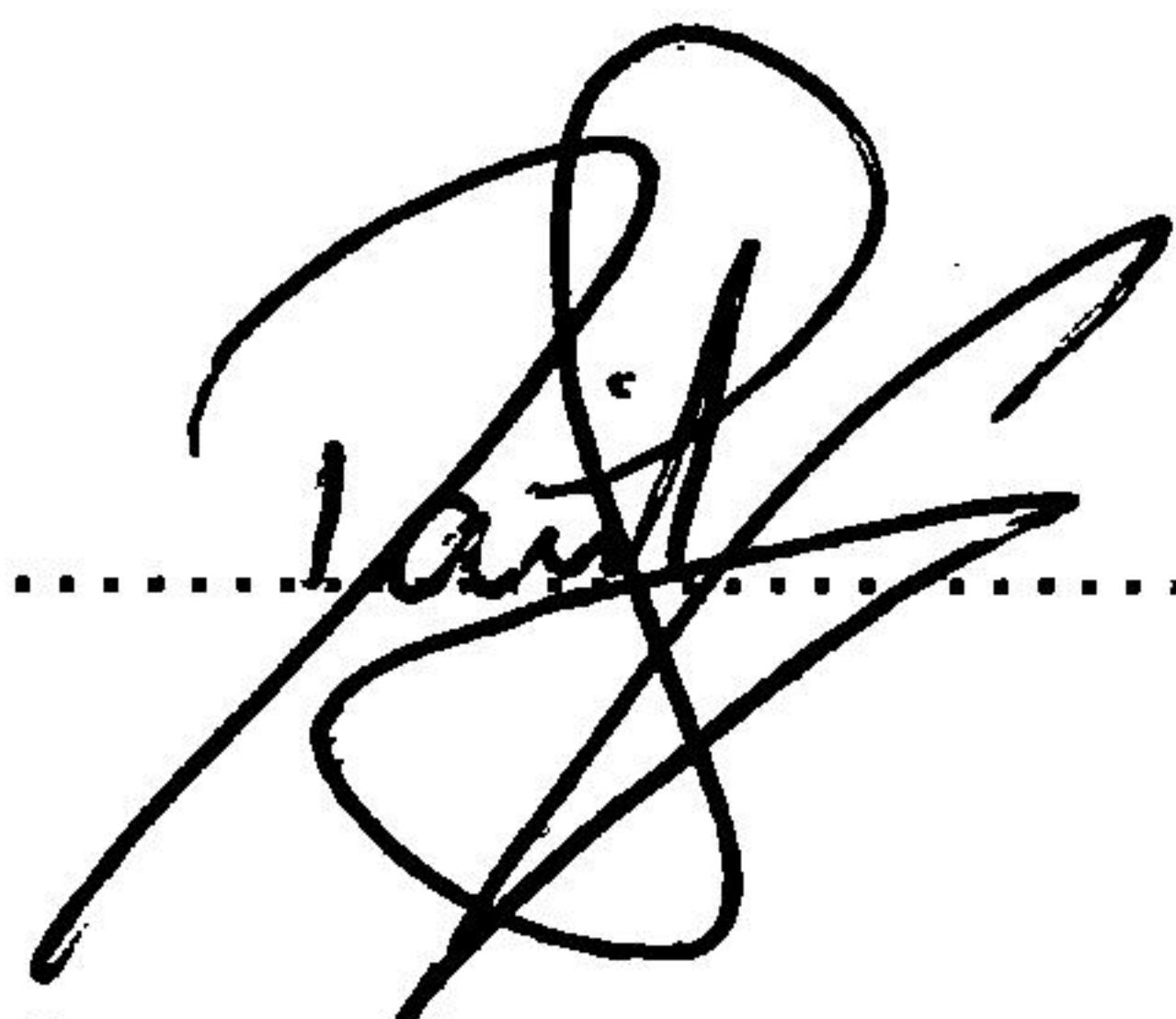
## EC DECLARATION OF CONFORMITY

MANUFACTURER..... Clydesdale  
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Install House  
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Woburn Road Ind.Est.  
Kempston , Beds  
MK42 7BZ

In accordance with **The Supply of Machinery (Safety) Regulations 1992** we hereby declare that the product described conforms with the Essential Health And Safety Requirements , the following EEC Directives : **89/392/EEC** and amendments **91/368/EEC**, **93/44/EEC** and **93/68/EEC** and the following transposed harmonised standards : **EN 292-1** , **EN 292-2** and **EN 1050**.

SIGNED .....



POSITION .....Managing Director.....



PRODUCT DESCRIPTION .....1300kg Cable Drum Trailer.....

MODEL .....CLY 760 1300.....

SERIAL NUMBER .....

TEST CERT. NUMBER.....

DATE OF MANUFACTURE .....

CLYDESDALE Ltd. Specialist manufacturer and supplier of overhead line and underground cable installation equipment, associated tools and personal protective equipment (PPE).



**[www.clydesdale.ltd.uk](http://www.clydesdale.ltd.uk)**

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