



# LYNCH

MEETING HIRE DEMANDS



# Transport Safety Manual

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## **INTRODUCTION**

We face a number of risks and hazards in our day to day activities in Plant Transport. This manual addresses these risks and sets out our procedures to follow for working safely at Lynch Plant Hire.

This document will be updated as new works activities bring up further safety issues and to keep in line with new legislation.

Carrying out your daily duties in a safe working environment is important in an ever-changing workplace. Your safety on site and when at your home depot is paramount in everything we do.

Please use this safety manual to refer to in all cases. Should you need further assistance make sure you contact your line manager for guidance.

Remember – “Never take risks!”



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## **LOADING AND UNLOADING**

### **Risk assessment**

We have identified the following risks from this activity:

- Falls (plant, person) • Crush • Trips (person) • Electrocution
- Collision (plant, person, car, pedestrian, vulnerable road user)

### **People affected by this activity**

- Transporter driver • Pedestrian • Site workers

### **Safe system of work**

The following Lynch Safe Working Procedures intends to eliminate or minimise the risks:

- 01 PPE required on site: hard hat, high visibility vest, toecap boots, gloves
- 02 Transporter driver must be competent to drive the plant item. The Transport Manager checks the competency of the driver.
- 03 If driver is unfamiliar with plant item, consult operator's manual for the machine or line manager. Be aware of cut out controls on plant.
- 04 Lorry should be on firm and level ground while loading and unloading
- 05 Check transporter bed is clear of debris and chains before working.
- 06 Check work area for overhead cables; in the event of the existence of work cables seek alternative work area or get approval from site manager to proceed.
- 07 Do not place hands or limbs into crush area on ramps while moving them up or down.
- 08 Plant with rollover protection should be operated with rollbar in ON position
- 09 Seat belts to be used at all times
- 10 When collecting plant from site, check plant is free of major defects. STOP working if defects are found that may compromise safety.
- 11 When collecting plant from site, be aware that muddy or wet conditions may cause machine to slip on ramps. In these conditions, tracks/wheels must be cleaned and/or sand be placed on the ramps to help grip. Bags of sand are available in the workshop.  
  
Failure to adhere to this advice could lead to the machine sliding/falling from the lorry whilst loading. If in doubt, please contact your manager before loading any machine.
- 12 Ensure site workers and pedestrians are a safe distance away from the work area, particularly at the bottom of the ramps and to the sides of the lorry. In situations where persons in proximity of work cannot be avoided, inform site manager and inform those in proximity of work.
- 13 Do not jump off the transporter bed; either walk down ramps or hold onto side of bed while dismounting whilst facing the bed.
- 14 Do not rush what you are doing; the risk of an accident (particularly trips) is much higher.

## Lorry / pedestrian risk area



## Crush zone on ramp



## **A clean deck with straps stowed away properly**



### **Lorry bed**

- a. Sweep down after drop off.
- b. Sweep down plant before loading.
- c. Secure chain / straps in a safe place.
- d. Tools must be stowed away correctly.
- e. Report defects on the bed to workshops / line manager.
- f. Handrails to be fixed and secure at all times unless carrying oversize plant.
- g. Chain / shackles / straps must be certified at all times.
- h. Remember - correct tools for the job!

**If in doubt and you need help  
contact your line manager**

## SECURING PLANT ITEMS TO THE TRANSPORTER

### Risk assessment

We have identified the following risks from this activity:

- Crush • Trip
- Impact • Plant fall from lorry

### People affected by this activity

- Transporter driver • Pedestrian • Site workers

### Safe system of work

The following Lynch Safe Working Procedures intends to eliminate or minimise the risks:

- 01 PPE required on site: hard hat, high visibility vest, toecap boots, gloves.
- 02 Use care when loosening ratchets, they can snap back causing injury.
- 03 Keep area clear.
- 04 Extreme caution when walking on or around transporter bed, looking out for potential trip hazards.
- 05 Use official guidelines on chain positioning.

### Chain positioning for securing plant

- a. All machines must be secured using enough chains or straps rated to the weight of the machine, multiple chains/straps might be needed. The Department of Transport code of practice for safety of loads on vehicles advises that we always follow the manufacturers recommendations for securing plant.
- b. The following pages contain diagrams specific to individual machines, showing the correct way to secure them.

# GENERAL GUIDANCE ON LOADING, UNLOADING AND SECURING PLANT

1. All excavators must be loaded with arms facing the direction of travel.
2. All dumpers and rollers under 3T are to be reversed onto lorry with Roll Over Protection Systems (ROPS) up and seat belt fastened and driven off.
3. All bobcats are to be reversed onto the lorry and driven off.
4. All drivers are to be aware of machine weights and their positioning on vehicles so as not to overload any or all of the axles.
5. All forklifts above 13m must be driven on and reversed off due to their heavy counter weight.
6. Drivers carrying large machines must have arms folded completely and be aware of boom height, so to minimise risk of bridge strikes etc. All drivers must carry out height measurements prior to departure.
7. All machines over 3.5T to be tied down by 1 tie down chain. Any machine over 7T are to be tied down by two tie down chains. Adjust the high indicator in the cab for extra load.
8. All forklifts over 5T (520-50) must be tied down using 2 chains.
9. When carrying multiple machines, you must be aware that they do not hit each other and cause damage.
10. All drivers must be aware of any overhead restrictions such as low telegraph cables when loading / unloading machines.
11. Drivers of HIAB are to make sure cranes are always stowed away before moving off and all legs are securely stored.
12. All lorries are to be washed weekly.
13. All drivers should be aware of crush zone by the ramps or beavertail.
14. It is the responsibility of the driver to load, unload and tie down machines on their lorry.
15. Attachment via Quick Hitch or drop chain as per risk assessment, method statement, Safe System of Work (SSOW). All chains must be certified. Only one attachment per Quick Hitch.

If in doubt and you need help  
contact your line manager





## Correct chain positioning for an excavator

1. Secure the machine to the trailer.

Fasten the undercarriage to the trailer using chains at four positions **A** (two each side). Make sure the chains are strong enough for the purpose.

Chain the arm to the trailer using either the hook, shackle or link as appropriate (item **B**).

2. Measure the machine height.

Measure the maximum height of the machine from the ground. Make sure that the transport driver knows the clearance height before he drives away.

3. Unloading the machine from the trailer.

Unloading is a reversal of the procedures described in steps 1 and 2.

## Correct chain positioning for excavators



After loading the machine in the designated position, secure it as described below.



1. Lower the dozer blade.
2. Fully extend the bucket and arm cylinders then lower the boom.
3. Stop the engine and remove the starter key.
4. Set the safety lock lever securely to the locked position.
5. Set stoppers in front and behind the crawlers.
6. Put a chain or wire rope over the lower frame and fasten it securely to prevent sideways slippage.
7. Secure the bucket with a chain or wire rope.



**IMPORTANT: Place a wooden block under the bucket so that it is not damaged by hitting the floor.**

## Correct chain positioning for a TB80FR excavator



After loading the machine in the designated position, secure it as described below.



1. Lower the blade.
2. Fully extend the bucket and arm cylinders then lower the boom.
3. Stop the engine and remove the starter key.
4. Raise the safety lock lever to the locked position.
5. Set stoppers in front and behind the crawlers.
6. Put a chain or wire rope over the lower frame and fasten it securely to prevent sideways slippage.
7. Secure the bucket with a chain or wire rope.

**IMPORTANT: Place a wooden block under the bucket so that it is not damaged by hitting the floor.**

### **WARNING:**

- **Know and follow the safety rules, vehicle code and traffic laws when transporting the machine.**
- **Consider the length, width, height and weight of the truck with the machine loaded on it when determining the best route.**



## Correct chain positioning for Excavators



### Securing the machine

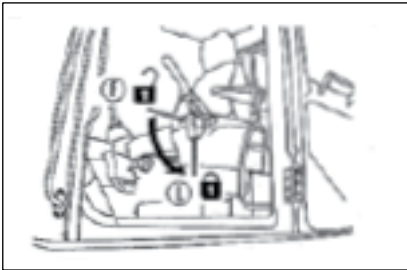
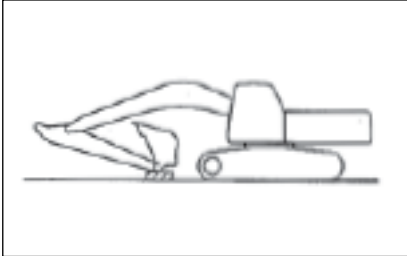
1. Move the safety bar down to lock the systems securely.
2. Stop the engine and remove the starter key.
3. Turn OFF the battery master switch.
4. Lock the door and the access covers.
5. Cover the exhaust pipe to prevent turbocharger damage.
6. Block each track and secure the machine with tie downs of adequate load rating so that the machine cannot move.

### Shipping the machine with installed attachments

Although arms are folded when the machine is shipped with attachments, arm cylinders are given excessive forces caused by self-gravity.

Insert a stay (**A**) between arm and boom for shipment.

## Correct chain positioning for 8 tons and above excavators



Load the machine onto a trailer as follows:

1. Extend the bucket and arm cylinders fully, then lower the boom slowly.
2. Set the lock lever securely to the LOCK position (L).
3. Stop the engine then remove the key from the starting switch.
4. Close all doors, windows and covers. Lock the covers, caps and doors fitted with locks.
5. Place blocks under both ends of the tracks to prevent the machine from moving during transportation. Secure the machine with chains or wire rope of suitable strength. Be particularly careful to secure the machine in position so it does not slip to the side.

### Storing radio antenna

- Loosen bolt (2) of radio antenna (1) at the rear of the cab, lower the antenna, then tighten bolt (2) again to secure radio antenna in position.
- When unloading the machine from the trailer and operating it, follow the opposite procedure from stowing to set radio antenna (1) vertical, then secure it in position with bolt (2).

## Correct chain positioning for atrical dumptruck



### Lifting the dumper

For lifting the dumper and appropriate lifting strap must be used. This lifting strap must be conducted through the handle at the edge of the dump body. When lifting, slew in the articulation block and secure it by means of a spring cotter.

### Loading and transportation

- Drive the unloaded dumper in slow reverse motion via a loading platform onto the truck or trailer, or load it by means of a crane (see 'Lifting the dumper' above).
- Tie down the dumper on the floor of the truck. To this end there are towing facilities provided at the front and rear of the machine.

### Towing facility

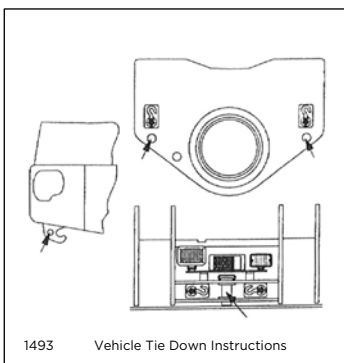
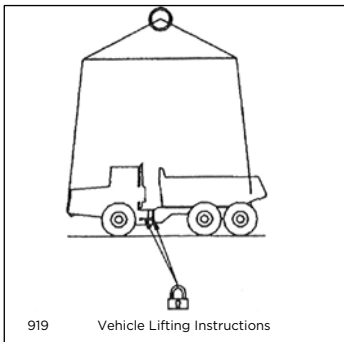
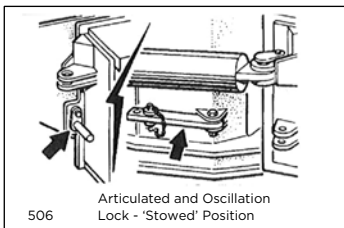
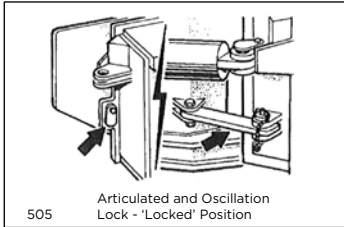
The dumper is provided with a towing facility. However it is not a towing vehicle and must not be used as one in difficult terrain. If the dumper must be used for towing in the construction site area, there must be a ballast of 25% of the useful load in the dump body. The towed vehicle plus the ballast in the dump body must not exceed the useful load of the dumper. The towing pin of the towing facility must be secured by means of the retaining cotter.

### Towing

For towing, the top cardan shaft of the power divider must be dismantled otherwise there is a risk of damage in the gear box because of insufficient lubrication.

If in doubt and you need help  
contact your line manager

## Correct chain positioning for atrical dumptruck



### Articulation and oscillation lock

- Always connect the steering and oscillation lock bar before working in the articulation area, before lifting the vehicle and during transportation of this vehicle by trailer/vessel.
- Always disconnect the steering and oscillation lock bar and secure in the 'Stowed' position before operating the vehicle. The vehicle would not be free to steer otherwise.

### Vehicle lifting precautions

- Prior to lifting, the vehicle should be parked on a level surface, wheels blocked, steering and oscillation lock bar connected, and the parking brake disengaged.
- The vehicle should be lifted using a spreader bar if possible. Lift using FOUR slings from the lifting points provided at the bumper end of the front chassis and at the rear of the body.

### Vehicle tie down precautions

- The vehicle should be secured at the tie down points located at the bumper end of the front chassis, the front face of the trailer chassis and the tow pin at the rear of the trailer chassis.

If in doubt and you need help  
contact your line manager

## Correct chain positioning for a telehandler



Load the machine onto a trailer as follows:

1. Place blocks at the front and rear of the trailer wheels.
2. Move the machine onto the trailer
  - a. Make sure the ramps are correctly in place and secure.
  - b. Set the boom.
  - c. Carefully drive the machine onto the trailer.
  - d. Engage the park brake and set the drive to neutral.
  - e. Lower the carriage onto the trailer.
  - f. Secure the stabilisers in the raised position.
  - g. Check that the overall height of the load is within regulations. Adjust if necessary.
  - h. Switch off the engine and remove the starter key.
  - i. Secure the cab.
  - j. Cover the exhaust stack.
3. Put blocks at the front and rear of all four tyres. Anchor the machine to the trailer with chains.



Note: anchor point positions can vary with machine. Use the following table to determine the correct anchor point position by model.

<b>Position (model)</b>	<b>Anchor Point</b>
Front (all models)	X
Rear (531-70, 533-105, 535-95, 536-60, 536-70, 541-70)	Y
Rear (535-125, 535-140, 540-140, 540-170)	Z

**WARNING:**

- **The safe transit of the load is the responsibility of the transport driver. Any machine attachments or parts that may move during transit must be adequately secured.**

Before transporting the machine make sure you will be obeying the rules and laws of all the areas that the machine will be carried through.

Make sure the transporting vehicle is suitable.

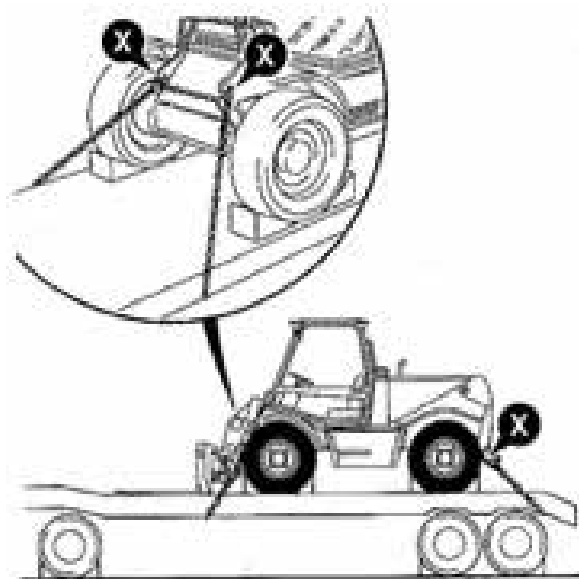
**WARNING:**

- **Before moving the machine onto the trailer make sure that the trailer and ramp are free from oil, grease and ice. Remove oil, grease and ice from the machine tyres. Make sure the machine will not foul on the ramp angle.**

## Transporting a telehandler

Load the machine onto a trailer as follows:

1. Place chocks at the front and rear of the trailer wheels.
2. Move the machine onto the trailer
  - a. Make sure the ramps are correctly in place and secure.
  - b. Set the boom.
  - c. Carefully drive the machine onto the trailer.
  - d. When the machine is safely in position engage the park brake and set the drive to neutral.
  - e. Lower the carriage onto the trailer.
  - f. Switch off the engine and remove the starter key. Secure the cab and cover the exhaust stack.
  - g. Check that the overall height of the load is within regulations. Adjust if necessary.
  - h. Put blocks at the front and rear of all four tyres. Anchor the machine to the trailer with chains. The anchor points (X) are shown on the illustration.
  - i. Measure the maximum height of the machine from the ground. Try to ensure the truck driver knows the clearance height before he drives away.



### WARNING:

- **The safe transit of the load is the responsibility of the transport contractor and driver. Any machine attachments or parts that may move during transit must be adequately secured.**

Before transporting the machine make sure you will be obeying the rules and laws of all the areas that the machine will be carried through.

Make sure the transporting vehicle is suitable.

### WARNING:

- **Before moving the machine onto the trailer make sure that the trailer and ramp are free from oil, grease and ice. Remove oil, grease and ice from the machine tyres. Make sure the machine will not foul on the ramp angle.**

## TRANSPORT DRIVER DELIVERY PROCEDURES

It is likely that vehicles will have been loaded the night before but it's still your responsibility to check you have the right machines and attachments etc.

Your daily driver's run sheet is to be filled out when you get to each individual job. The only information you need to put down while you are in the depot is the start mileage, registration and your start time - you are not to sit in the yard filling out the day's work in advance. I expect all drivers to get out and on the road as soon as possible and fill out the sheet when waiting out on site.

If your ticket is a handover it must be signed and printed by the customer - machines can't be dropped unless this is signed or agreed by the customer and the office.

Delivery tickets that don't have the handover stamp can be dropped early as long as you are 100% sure it's in the right place and not causing problems with the traffic. Machines that are dropped early are to be locked and the keys put on the roof. If you're not sure phone your line manager or the office.

If the machine you're delivering has additions that aren't on the ticket (e.g. extra buckets) please write these on the ticket and the office will amend when the ticket comes back into the office.

When delivering or collecting, if you are held up on site for anything longer than 20 minutes you must call your line manager or the office to assist or sort out the problem so you can carry on with your other work.

PDI's must be filled out for deliveries and collections. When collecting machines, PDI sheets must be filled out and fuel must be checked and signed off by the customer on site. If there is no one on site you must phone the Hire Administration Team who will let the customer know, also, if there are any shortages, e.g. buckets please contact the office before leaving site so we can establish if they have been stolen or just lost.

ALL damage MUST be written on the PDI. If the machine you are collecting is kept on hire, there is a sheet attached that needs to be filled out stating the reason why and signed by the customer. If the machine is not collected for any other reason, e.g. no keys, broken down etc., YOU MUST write this on the ticket so the office knows when the ticket comes back in.

All lorries are to be fuelled at the end of every shift unless your tank is already full. All drivers must clock in and out every day if you want to be paid all your hours worked. All trucks will have fuel fobs. These must stay with each truck. If your truck doesn't have a fuel fob then speak to your manager / supervisor but do not swap the fobs as this interferes with the mileage for the original vehicle allocated to that fob.

When doing machine moves or day work, these tickets MUST be signed at the end of the day - failure to do this will result in us not getting paid and if this happens, maybe YOU, so this is very important! Time on and off should also be written down for all these jobs.

## **USE OF CRANE LORRY**

### **Hazard assessment**

**The following hazards have been identified in this activity:**

- **Difficult or awkward loads**
- **Uneven ground**
- **Close proximity of pedestrians**
- **Close proximity of other vehicles or machines**
- **Maintenance of vehicle crane and slings**
- **Falls from height**
- **Tools or materials falling from a working platform, containers or the structure**
- **Movement of vehicles or cranes**
- **Electricity**

### **Risk assessment**

**We have identified the following risks from this activity:**

- **Overturning of vehicle when carrying awkward loads.**
- **Overturning of vehicle on uneven or potholed ground.**
- **Personal injury from collision between vehicle and pedestrian.**
- **Personal injury and damage from collision between particular vehicle and other site vehicles.**
- **Personal injury by falls from height.**
- **Being struck by falling tools containers or material.**
- **Being struck or crushed by overhead structures or piping.**
- **Electrical shock through contact with electrical units or sources.**

## USE OF CRANE LORRY (CONT.)

### Safe system of work

The following Lynch Safe Working Procedures intends to eliminate or minimise the risks:

1. Only trained and certificated employees authorised drive the specified HIAB LGV vehicle. Driver will produce CSCS Card and LGV Licence.
2. Driver to wear hard hat and high visibility vest at all times whilst on site.
3. Flashing lights fitted to vehicle.
4. Reversing bleeper fitted to vehicle.
5. Daily safety checks to be made by driver and documented.
6. Mechanical maintenance is to be carried out only by authorised personnel.
7. Thorough examination conducted on vehicle and crane annually. Test certificate of crane will be produced.
8. Driver to be Inducted by site on arrival.
9. First Aid information and emergency procedures to be given to driver by site on arrival.
10. Site manager or supervisor must be notified before any intended work is begun.
11. The crane is to be moved to a safe area to allow access.
12. Work area to be cordoned off and pedestrian and vehicular traffic diverted away from the work area (cones or safety tape and signage).
13. If any overhead power cables above, power must be tested to ensure that all power is off before work commences.
14. Any loose items that are on top of or inside the item to be lifted should be removed before lift.
15. All tools and other items inside containers to be cleared by site before commencing work.
16. All works must be managed, supervised and instructed by site; any new hazards found or that may occur on the day work commences must be assessed by site before any work commences and notified to persons who perform the tasks.
17. Crane support legs must be **fully extended** on working side before any lift can be completed.
18. If crane support legs cannot be fully extended due to site restrictions, the appointed person and your manager must be informed.
19. The site agent/site foreman must sign an indemnity form before any lift can be performed if the crane legs cannot be fully extended.

## **DRIVING SAFELY**

Clearly the penalties and consequences to you, your employer and the general public of not driving safely can range from the inconvenient to the very serious and, sometimes to the catastrophic.

As the driver of a heavy goods vehicle, you have a special responsibility – not just to yourself, but to all other road users. You can set a good example to others by driving safely, courteously and with consideration for everyone else on our busy roads.

Employers should take great care to ensure that the vehicles you use are safe and maintained to an appropriately high standard. Alternatively, you may be self-employed and responsible for the safety and maintenance of your own vehicles. However, this on its own is not enough to ensure safety. It is up to you, as the driver, to:

- check your vehicle regularly / daily walk round checks.
- know the route you are driving.
- be aware of weather forecasts.
- drive safely.

Many accidents are caused by driver error and the majority are preventable. Therefore it is important that you take time to assess what potential dangers your next journey involves and what you need to do to complete the journey safely and efficiently.

Make sure you plan your route when oversized loads are carried. You need to make sure you have your movement border and escorts where necessary.

## DRIVING SAFELY: BASIC PRINCIPLES

### Mirrors

It is important to know as much about the traffic and obstacles around you as possible. Before starting your journey, you should always check your mirrors to make sure they are in the correct position for you to be able to see around the vehicle. You should always make full use of your mirrors before making a manoeuvre.

You should be aware of blind spots, both for yourself and others. Many larger goods vehicles are fitted with 'close proximity' and 'wide angle' mirrors to survey the driver's blind spot on the passenger side of the vehicle. It is particularly important that these mirrors are properly adjusted so that you can see (for example) cyclists close to the nearside of the vehicle. Keep a defensive space around your vehicle to enable you to react. You should use your mirrors frequently so that you are constantly aware of what is happening around you.

### Route planning

Route planning is an important part of any journey. The length, width, weight and height of your vehicle will sometimes dictate the route you take. If possible you should also plan routes to avoid congestion at peak times.

Before starting a journey plan your route including rest breaks, and identify the potential hazards. This will enable you to avoid or minimise the risk of being involved in dangerous or risky situations.

Planning your journey will help you select the safest and most efficient route. Always plan an alternative route to allow for accidents or bad weather conditions.

### Forward planning

Use the visibility advantage provided by the high seating position in a cab to your advantage. Plan ahead for every manoeuvre you need to make, understand the road and consider the other road users around you.

### Speed limits

Excessive (i.e. above the speed limit) and inappropriate speed continues to be a contributory factor in around 13% of all accidents; around 30% of fatal car accidents; and around half of fatal motorcycling injuries.

Observing speed limits is part of your responsibility. Speeding is illegal, dangerous and puts your life and the life of other road users at risk. Speed limits exist for your protection.

Your vehicle may be fitted with a speed limiter, which normally is set for motorway speed limits. It does not function within lower speed limits, so it is important to watch your speed carefully in these situations.

# DEPARTMENT OF TRANSPORT CODE OF PRACTICE – SAFETY OF LOADS ON VEHICLES

## 13.1

This section provides guidance on the measures necessary for the safe carriage of tracked and wheeled engineering plant by vehicles constructed to comply fully with the Motor Vehicles (Construction and Use) Regulations 1986 and thereby permitted unrestricted use of the roads. It does not deal with the carriage of large machines etc. on special purpose vehicles whose use on the roads is restricted by current regulations.

However, the general advice contained in this section will apply in many cases.

## 13.2

It is recommended that manufacturers of plant equipment either fit lashing points or provide a recommended lashing scheme for each of their vehicles.

## 13.3

Heavy engineering plant is normally transported on purpose built vehicles which are specifically designed to provide easy loading and unloading facilities and are usually provided with adequate anchorage points for attaching the lashings. Lighter engineering plant may in some circumstances be carried on general-purpose vehicles. However, in these cases the method used to secure the load should provide equal security to that obtained by using purpose built vehicles.

## 13.4

High loads may endanger bridges etc. over roads, so when these are carried it is essential that the driver know the exact height of the load, and the width of the load at that height. Also, loads with a high centre of gravity can seriously affect the vehicle's stability and such items of engineering plant should only be transported on vehicles with a low platform height.

## 13.5

A wheeled or tracked vehicle must be lashed down in position on the carrying vehicle, with the parking brake applied. The effectiveness of the parking brake on its own will be limited by the frictional resistance between the vehicle and the deck of the carrying vehicle, and even in normal driving conditions this will be inadequate and the vehicle will therefore require additional restraint. This additional restraint should take the form of a lashing system and some arrangement whereby the load is prevented from moving either forward or to the rear by an obstacle (or obstacles) securely fixed to the vehicle. These should butt against the wheels or tracks or some other part of the equipment carried.

## 13.6

Engineering plant should be dismantled as far as is necessary to keep its overall dimensions within the length, width and height (see para. 3.5) limits of the carrying vehicle. Where this is not possible, the conditions and restrictions contained in Regulations 10, 81 and 82 of the Motor Vehicles (Construction and Use) Regulations 1986: SI 1986 No 1078, and the relevant provision of the Motor Vehicles (Authorisation of Special Types) General Order 1979: SI 1979 No 1198, concerning the carriage of wide or long loads should be complied with.

## 13.7

All movable assemblies such as jibs, brackets, booms and cabs etc. must be left in the position recommended for transportation by the manufacturer and must be secured to prevent movement relative to the main body of the machine.



## 13.8

Before the machine is moved onto the trailer all loose dirt that may otherwise come off and obstruct the highway or damage other vehicles must be removed. The ramp, the tyres of the machine and the bed of the trailer itself should all be free from oil, grease, ice etc. so that the machinery cannot slip. The transporter wheels should be chocked at the front and rear.

## 13.9

When the machine has been stowed and the engine stopped, the pressure in the hydraulic system should be relieved by moving all of the control levers through all their positions.

This operation should be done at least twice. Controls should be set so as to prevent movement of ancillary items during transit.

## 13.10

Bags, tool kits, or other heavy objects should not be left loose in the operator's cab of the plant being carried.

## 13.11

The positioning of the engineering plant and any of its detached assemblies should be arranged so that the legal axle weight limits are not exceeded and the safe handling of the vehicle is not impaired. The clearance between the undersides of low loading vehicles and the road surface should be checked before moving off (see Section 3.6).

## 13.12

The machine should be positioned on the carrying vehicle's platform so that forward movement is prevented either by part of the main body of the vehicle, e.g. swan neck, step or headboard, or by an attached transverse member securely attached through the platform to the vehicle's chassis frame.

## 13.13

All items removed from the machine such as buckets, grabs, blades, shovels and lifting appliances should be lashed to the deck of the vehicle.

## 13.14

Wheeled and light tracked machines should be restrained so that the effect of bouncing caused by road shocks transmitted from the carrying vehicle and amplified by the machine's tyres or suspension units is minimised. Where possible the suspension unit of the machine should be locked and vertical movement limited by lashings or other means of restraint.

Otherwise the machine's frame or chassis should be supported on blocks.

## 13.15

Unless the machine is supported, the full contact area of its tyres, tracks, or drums should rest on the deck of the carrying vehicle. If the tracks extend outside the frame of the carrying vehicle then the machine's frame or chassis should be supported.

## 13.16

The machine should be restrained against forward, backward and sideways movement by chain or webbing lashings attached to anchorage points on the vehicle. All lashings should incorporate some form of tensioning device.

## 13.17

In deciding the number of anchorage points to be used when arranging a restraint system, the following factors should be considered:

- a. The need to position the machine to achieve the correct load distribution to meet the legal axle load requirements and to ensure that the vehicle's handling is not impaired.
- b. The extent to which other load restraint features is incorporated in the design of the vehicle.
- c. Whether the machine has wheels, tracks or rollers.
- d. The weight of the machine to be carried.
- e. A minimum of four separate anchorage points should be used.

## **DEPARTMENT OF TRANSPORT CODE OF PRACTICE – SAFETY OF LOADS ON VEHICLES (CONT.)**

13.18

The following guidelines apply to mobile engineering plant, that is vehicles fitted with hoists, working platforms, support legs and so on.

- a. High loads may endanger bridges and it is essential that the driver knows the height of the vehicle and has it displayed inside the vehicle cab.
- b. All movable assemblies must be placed in the position and locked, where possible, as recommended for transportation by their manufacturer.

### **Restraining Devices**

13.19

Apart from specialised fixing devices, the selection of materials for use in tie down schemes for engineering plant will be limited to chains, steel wire rope, webbing and their associated tensioning and coupling devices.

13.20

Where a transverse (side to side) beam is used as a baulk it should be securely fixed so that all loads imposed on it are transmitted to the carrying vehicle's chassis frame. Where individual wheels or drums are chocked with blocks or scotches these must be robust enough to resist crushing and be securely attached to the vehicle's platform where possible.

13.21

The lashings or securing devices should only be attached to those parts of the engineering plant, which are of sufficient strength to withstand the stresses likely to be imposed on them.

13.22

Where engineering plant comes equipped with dedicated lashing points for use when being transported, these points should be used and the vehicle secured as per manufacturer instructions. Care should be taken before lashing to lifting points as these may not be suitable for restraint purposes.

13.23

The loaded machine should be inspected after the vehicle has been driven for a short distance in order to check that no movement has taken place and that restraining devices are fully secure. Periodic inspections should be made during the course of the journey.

## WINCH SAFETY

### BASIC REQUIREMENTS

1. Keep yourself and all personnel clear of the winch rope.
2. Never step over, stand near or touch a winch rope under tension.
3. Always wear protective clothing: riggers gloves, safety boots, safety helmet, high visibility clothing and goggles or visor.
4. Always check the winching layout and capacities of equipment ('walk the line').
5. Do not use the winch rope as a tow rope.
6. Always obey rope-handling procedure.
7. Never wrap winch ropes around loads or attach rope hook back onto rope to form loop.
8. Carry out regular inspections of winch rope.
9. Always locate position of emergency stop before attempting to use winch.
10. Always maintain 5 wraps of rope around winch drum.
11. Never operate winch drum free spool with winch rope attached to load.
12. Always survey site for potential hazards before deploying winching equipment.
13. Always survey path load will be winched through for potential hazards.
14. Do not use winch for movement of persons.

## PLANT BODY SAFETY

### BASIC REQUIREMENTS

1. Keep yourself and all personnel clear of 'downhill side of load'.
2. Keep yourself and all personnel clear of area behind loading ramp.
3. Keep yourself and all personnel clear of moving ramp.
4. Unlock loading ramp.
5. Do not move vehicle unless ramp is fully stowed and locking stays engaged.
6. Ensure machine being loaded/unloaded cannot roll away, chock if necessary.
7. Do not ride on machine being loaded/unloaded unless it technically requires driving.
8. Do not allow yourself or other personnel to be positioned between load and body headboard.
9. Do not walk up body alongside machine being loaded/unloaded.
10. A minimum of 4 load restraints shall be used to secure machines to body.
11. Always 'dump air' from suspension before loading/unloading.
12. Ensure suspension is restored to 'ride' position before moving vehicle.
13. Always ensure that area to load/unload is safe and act to minimise collision risks.
14. If jacklegs are fitted to vehicle they must always be in firm contact with ground whilst loading. If the ground is too uneven for this then the jacklegs must be blocked to ensure they are supported.

# GUIDANCE TO THE SAFE USAGE OF PLANT TRANSPORTER TYPE BODY FITTED WITH ELECTRIC WINCH AND HYDRAULIC LOADING RAMP

## THE FOLLOWING IS FOR GUIDANCE ONLY

Each user must carry out a risk assessment for the type of operation the equipment is used for and act to minimise the risks identified.

When operating at the roadside the danger from other road users place operators at high risk.

Before attempting to load/unload the body, ensure the area to work in is safe and secure. This may involve deploying warning beacons (light bars), cones, or requesting help from your supervisor. Ensure your actions do not cause a hazard to other road users.

### POWER ISOLATION

A power isolation switch is fitted on the vehicle. Ensure this is off when the winch or ramp is not in use.

Both the winch and the ramp draw power from the vehicle battery. When operating either, ensure engine is running to prevent battery discharging.

### EMERGENCY STOP

Before operation locate position of Emergency Stop on vehicle. In an emergency depress stop button, to reset twist button.

### OPERATION OF HYDRAULIC LOADING RAMP

The control station for the ramp is situated at the nearside of the vehicle. Stays are fitted to restrain ramp during travel.

## RAMP OPERATION

### STANDARD & FLIP-OVER RAMPS

#### Lowering Ramps

Lower jacklegs.

'Dump' air from air suspension.

**NOTE:** Never lower ramps before dumping suspension, always dump suspension first.

When ramp is in use or being deployed keep area behind ramp clear of all personnel.

Release the stays at each side of the ramp.

**WHEN RELEASING STAYS DO NOT STAND BEHIND THE RAMP, STAND TO THE SIDE CLEAR OF THE RAMP. RELEASE OFFSIDE STAY FIRST.**

Ensure area behind ramp is clear.

Lower ramp. Continue to lower until ramp tip is firmly on the ground. If flip-over ramps are fitted then the feet on the end of the upper section must also be firmly on the ground.

The ramp is now ready for loading.

#### Raising Ramp

When ramp is in use or being deployed keep area behind ramp clear of all personnel.

Ensure no part of the load will obstruct the ramp when, raised to the stowed position.

Ensure all personnel are kept clear when stowing ramp.

Raise ramp. Continue to raise until ramp is firmly against stops.

Keep all personnel and limbs away from moving ramp.

Engage stay on nearside first.

**WHEN ENGAGING STAYS DO NOT STAND BEHIND RAMP, STAND TO THE SIDE CLEAR OF THE RAMP. ENGAGE NEAR SIDE STAY FIRST.**

Under no circumstances attempt to drive without stays being engaged.

Return air suspensions to 'ride' condition.

Raise jacklegs.

### SLIDING RAMPS

1. Ensure ramps are fully vertical.
2. Remove stays.
3. Slide ramps.

Never use slider when ramps are lowered. Always slide ramps out level with side of body and fit stays before travelling.

## **RAMP OPERATION (CONT.)**

### **USING CHEESEWEDGE RAMPS**

On vehicles fitted with folding cheesewedge ramps, operate as follows:

- Dump air suspension and ensure jacklegs are in firm contact with the ground.
- When in straightened position, the ramps are to be operated with the same method as standard ramps. BUT operator MUST ensure the locking pins are fully engaged on both sides of ramp before use with a visual check.

### **TO FOLD RAMPS**

- Ensure straightened ramps are vertical and fully against stops.
- Operate folding control button or spool.
- Locking pins will automatically retract and ramp will fold.
- To reverse operation, operate opposite control, ramps will straighten, and locking pin will engage.

#### **ALWAYS:**

Visually check the locking pins have fully engaged before use.

### **HYDRAULIC BEAVERTAIL**

#### **To raise tail:**

1. Ensure ramps are fully vertical.
2. Raise tail to full height.
3. Engage travel stays.

#### **To lower tail:**

1. Release travel stays.
2. Lower tail onto chassis.

Always ensure travel stays are engaged before raised.

When loading through from a trailer ensure the jacklegs fully grounded. There is a 5T limit on vehicles through the ramps from a trailer.

## TRANSPORTER WINCH OPERATION

As with any powerful tool there are hazards involved with winching operations. However with proper training and risk awareness coupled with well-maintained equipment and respect for the power available, the operator should come to regard winching equipment as a most versatile and efficient tool.

The winch may be controlled by either a wanderlead/spool valve control or by a radio remote handset, which gives the operator freedom of movement without the encumbrance of trailing wires.

**NOTE:** The winch will only 'winch out' if there is a load on the winch rope. To avoid a badly spooled winch drum and rope damage do not 'winch out' without tension on the rope.

A free spool control is provided on the end of the winch. This control disconnects all braking and drive from the drum producing a drum, which is free to rotate. It is useful if a long length of rope requires to be pulled out by hand.

Under no circumstances attempt to engage free spool with a load attached to the winch rope.

At all times it should be remembered that winching operations involve tensile forces, which are difficult to restrain in the event of a failure within the winching system. In the event of a failure the tensile forces will suddenly be released causing the winching equipment and winch rope to 'whiplash', as a piece of released elastic. Bodily contact with a winch rope suddenly released in this manner may cause serious injury. In addition the load will be released and may move uncontrollably possibly causing further injury.

Before using a winch, identify the location of the emergency stop/isolator switch.

To prevent discharge of vehicle battery. ensure engine is running when using an electric winch.

The maximum power available from a winch is when the rope is on the bottom layers of the drum. Therefore avoid 'overloading' the drum with excessive length of rope.

When handling the winch rope always wear good rigger gloves.

To maintain the winch rope in a safe condition good rope management is essential – keep the rope as square to the drum as possible – maintain tension on rope by hand when powering 'out' under no load – maintain tension on rope by hand when powering 'in' under no load periodically pull all the rope off the drum and rewind under hand tension to achieve neat and tightly packed wraps of rope on the drum.

Never allow the winch rope to slide through the hands. Always handle winch rope 'hand over hand'.

Inspect the rope and end fittings daily for damage and deformation. Check regularly for signs of wear in the form of broken strands or severe kinks along its length. If there are more than 6 strands broken in any length of 100mm the rope is severely weakened and must be replaced.

Safety catches must be in place on hooks.

Keep yourself and all personnel clear of the winch rope.

Never step over, stand near or touch a winch rope under tension.

Never wrap the winch rope around a load or hook the rope back in itself.

Never pass the winch rope around any object other than a snatch block or sheave specially designed for the purpose.

Always maintain 5 wraps of rope on the drum – the rope anchor on the drum will not withstand the winch pull without these 5 wraps on the drum. This is of particular importance when winching "out".

## **TRANSPORTER WINCH OPERATION (CONT.)**

Always ensure that the drive is fully engaged to the winch and that the free spool is not partially selected before attempting to winch a load.

Never operate the winch drum to free spool if the rope is attached to the load.

Always survey the site for potential hazards before deploying the winching equipment.

Ensure that any additional equipment used such as shackles, webbing straps etc are compatible to the winch capacity.

Always survey the path the load will be winched along for potential hazards.

Do not use the winch for the movement of persons.

Always keep the 'down hill side' of the load clear of persons.

Do not use the winch rope as a towrope or pull the rope of the drum by engaging free spool, attaching the rope to the load and driving away.

When repositioning the rope on the load always stabilise the load before removing winch rope.

Ensure attachment point to load is secure and will forces.

Position winch rope attachment to load centrally. The use of 'brothers' on two webbing straps is often required.

Before applying tension to the load check winch rope is not fouling other components and all attachments are secure.

Do not use the winch to secure the load on the body. After securing the load with cargo restrain equipment operate winch 'out' to just release the winch tension. When unloading first ensure tension is replaced in winch rope by momentarily operating winch 'in' before removing cargo restraints.

The operator should not be positioned between the load and the winch or on the 'downhill' side of the load

When unloading do not allow the load to 'snatch' or operate the winch 'out' in a series of 'blips'. This will cause severe shock loading to the rope and winch resulting in possible failure.

Before releasing the winch rope from the load ensure the load is stabilised and that there is no danger of the load 'running away'.

Apply machine handbrake if fitted. Ensure machine is secure, loose items secured etc.

'Blip' winch 'out' control to just release tension on winch rope.

Stow hydraulic loading ramps and ensure their security.

Return air suspension to 'ride' condition.

Turn battery isolator switch/emergency stop to 'off'.

During journeys periodically check security of load restraints.

### **UNLOADING TRANSPORTER BODY**

Beware gradients; will the machine roll forward on the body during unloading when load restraints removed? In general attempt to unload with the transporter facing 'uphill'.

Dump air suspension.



Deploy ramp to load position. Ensure ground end of the ramp tip is in contact with ground. If jacklegs are fitted they must **ALWAYS** be in firm contact with the ground. Block if necessary.

Ensure there is sufficient space at base of ramps to unload machine.

'Blip' winch 'in' control to restore tension on the winch rope.

Do not drive machine off transporter, use the winch. Some machines require being driven and winched. Take great care not to shock load the winch. When machine passes over change of angle between beavertail and flat part of body the machine may roll rearwards. Carry out this part of the operation as slowly as possible ensuring that the winch rope does not go slack.

## **DO NOT WALK DOWN ALONGSIDE THE MACHINE BEING LOADED ON THE STEERING WHEEL.**

THERE ARE ONLY TWO PLACES AN OPERATOR SHOULD BE POSITIONED:

1. ALONGSIDE THE BODY ON THE GROUND.
2. IN THE NORMAL DRIVING POSITION OF THE MACHINE BEING UNLOADED IF IT REQUIRES TO BE DRIVEN AND WINCHED AT THE SAME TIME.

Keep 'downhill' side of operation clear of all personnel.

Release handbrake.

Ensure machine is in neutral gear. Release steering lock if fitted.

Release load restraints.

Commence winch 'out' operation, do not operate winch in a series of 'blips', and load in one continuous operating. Ensure that machine rolls off body controlled by winch rope.

## **IF MACHINE STOPS. IMMEDIATELY STOP WINCH OPERATION.**

When machine is clear of ramps. secure machine, apply handbrake and remove winch rope.

Stow winch rope and load restraints. Stow loading ramps.

Return air suspension to 'ride' condition.

## **LOADING THE TRANSPORTER BODY**

Beware gradients; will the machine roll forward on the body during loading? In general attempt to load with the transporter facing 'uphill'.

Turn battery isolator switch/emergency stop to 'on'.

Dump air suspension if vehicle fitted with air suspension.

Deploy ramp to load position. (See operation of Hydraulic Loading Ramps).

Ensure ground end of the ramp tip is in contact with ground.

If jacklegs are fitted they must always be in firm contact with ground. Block if necessary.

Position machine to be loaded centrally at base of ramps with wheels touching ramps.

Do not drive machine onto transporter, use the winch.

Ensure machine to be loaded has handbrake 'on' or if not fitted with handbrake will not roll away whilst preparing for loading, check if necessary.

## **TRANSPORTER WINCH OPERATION (CONT.)**

Deploy winch rope (See the Transporter Winch section).

Select attachment point on machine and fit winch rope hook – it may often be necessary to use a strop or shackle onto the attachment point before fitting hook. Ensure attachment point is secure. If in doubt use brothers for central pull from secure parts of the machine.

Operate bypass valve on hydraulic: driven machines if fitted.

Ensure vehicle is in neutral gear. Release steering lock if fitted.

Release machine handbrake.

Commence winch operation: do not operate winch in a series of ‘blips’ and load in one continuous operation.

Keep ‘downhill’ side of operation clear of all personnel.

Operators shall not position themselves between machine and transporter body headboard.

During loading it may be required to steer the machine, this may be done by pushing the front wheels of the machine from the ground whilst the operator stands on the ground alongside the body.

**DO NOT WALK UP THE BODY ALONGSIDE THE MACHINE BEING LOADED WITH A HAND ON THE STEERING WHEEL.**

**THERE ARE ONLY TWO PLACES AN OPERATOR SHOULD BE POSITIONED:**

1. ALONGSIDE THE BODY ON THE GROUND.
2. IN THE NORMAL DRIVING POSITION OF THE MACHINE BEING LOADED IF IT REQUIRES TO BE DRIVEN AND WINCHED AT THE SAME TIME.

Once machine is positioned on transporter body fit load restraints to each wheel or lashing points on machine. First restraint fitted should restrain machine from roll ‘off’. Load restraints should restrain the machine in all directions.

# SSOW: Loading/Unloading Plant Transporters

Issue Number: 02 Date of Issue: 01/06/14 Based on: RA09

## PPE TO BE WORN

For this activity, the following PPE must be worn

- High-vis Vest / Jacket
- Safety Boots
- Safety Gloves
- Safety Helmet



## SAFE SYSTEM OF WORK

- All lifting appliances are to be serviceable with no defects and fit for task
- All lifting appliances are to be load tested as per statutory requirements and a valid thorough examination and load test certificate held in the plant office
- Daily user checks and inspections are to be carried out on all machines and lifting accessories prior to lifting. If defects are found the machine or accessory is not to be used and must be quarantined out of service until repaired. All lifting accessories are to have a valid thorough examination certificate held in the plant office
- All lifting operations are to be carried out by competent operatives
- All lifting operations are to be planned and supervised by a competent person except for generic or repetitive small scale lifts
- Operators are to ensure that ASLs or RCIs fitted to lifting appliances are working and switched on at all times during lifting operations to ensure that the Safe Working Load of the lifting appliance is not exceeded
- Operators are to ensure that the lifting appliance is operated at all times in accordance with the manufacturers handbook and within the recommended safe working limits and duties chart displayed in cab
- All suspended loads are to be controlled by using tag lines where practicable
- Exclusion zones which prohibit entry by unauthorised personnel are to be imposed where practicable, especially when lifting near or over pedestrian walkways
- PPE – Safety boots, Hi-Vis, safety helmet, gloves to be worn by all during lifting operations

## IDENTIFIED RISKS

The SSOW above has been compiled after identifying the following risks from this activity

- Failure of lifting appliance
- Failure of lifting accessories
- Incorrect slinging techniques leading to loads or parts of loads dropping or slipping whilst being lifted
- 3rd party intrusion into dangerous areas during lifting
- Contact with overhead cables
- Contact with structures
- Personnel being struck or crushed by suspended loads

**FOR MORE INFORMATION PLEASE REFER TO RISK ASSESSMENT 09**

### PPE TO BE WORN

For this activity, the following PPE must be worn

- High-vis Vest / Jacket
- Safety Boots
- Safety Gloves (As req'd)
- Safety Helmet (As req'd)



### SAFE SYSTEM OF WORK

- Load bed and ramps to be kept free of debris, mud, oil, grease, waste, ice etc. Sand to be spread where necessary to aid grip. Tracks/Wheels of plant to be cleaned if necessary before loading.
- Lashing chains, slings, timber, ropes etc to be stowed safely when not in use so as not to create trip or falling hazards.
- Maintain 3 points of contact if possible, when working near the edge of the load bed.
- Only competent, authorised personnel to load/unload.
- Staff to follow safe loading procedures for each machine type in the Transport Safety Manual when loading/unloading.
- Plant to be secured to Transporters as per manufacturer's procedures and Transport Safety Manual procedures and guidance.
- Keep unauthorised personnel away from transporter. Use banksmen where possible to control pedestrian movement.
- Plant to be guided by a competent banksman standing in a safe place during loading/unloading.
- Drivers to receive familiarisation training for each item of plant being transported. Training records to be maintained.
- Ensure transporter is parked on firm level ground during loading/unloading.
- Anti - Roll bars fitted to dumpers, rollers and mini excavators etc. are to be locked in the raised position at all times during loading/unloading. Seat belts are to be worn on all machines at all times.
- To prevent drivers/operators being crushed in the event of a plant machine rolling over - Never try to jump clear - stay in the seat with the seat belt fastened
- Do not jump off the transporter load bed. Walk down the ramps or sit down and lower yourself gently off the edge.
- Never work directly underneath overhead power cables.
- Never work within 9 metres horizontally of overhead power cables supported on wooden poles
- Never work within 15 metres horizontally of overhead power cables supported on steel pylons or structures
- Always follow safe systems of work and routes provided on construction sites when driving under overhead power cables
- Keep hands clear of pinch points and crush zones on ramps and trailers
- All loading/unloading to be carried out slowly and safely - do not rush
- When collecting plant from sites ensure plant is free from defects which could affect safe loading. If in doubt stop work, do not move plant and seek advice from the transport office
- Always liaise with our clients site staff to ensure on site risks are understood and controlled

### IDENTIFIED RISKS

The SSOW above has been compiled after identifying the following risks from this activity

- Falls of people or objects from the transporter load bed and ramps
- Falls of vehicles from the transporter load bed and ramps
- Slips & Trips
- Personnel being struck by moving or falling vehicles
- Electrocution from contact with overhead power cables
- Hand injuries

**FOR MORE INFORMATION PLEASE REFER TO RISK ASSESSMENT 21**

## SSOW: Use of Quick Hitch Attachments

Issue Number: 02 Date of Issue: 01/06/14 Based on: RA14

### PPE TO BE WORN

For this activity, the following PPE must be worn

- High-vis Vest / Jacket
- Safety Boots
- Safety Gloves
- Safety Helmet
- Safety Glasses



### SAFE SYSTEM OF WORK

- Operation of Quick Hitch is limited to trained and competent staff. Additional training provided by means of toolbox talks for site specific safety issues
- Quick Hitch to be placed in position and plant turned off prior to disengagement. Quick Hitch to be disengaged in a slow/steady motion to reduce the frequency of the buckets “rocking” motion. Use of Semi-Automatic Quick Hitches have been prohibited by L Lynch.
- OPERATOR TO CHECK HITCH IS FULLY AND CORRECTLY ENGAGED PRIOR TO USE – If in doubt seek advice from L Lynch Management
- Staff to use the disengagement tool provided and to report any faults immediately
- Ensure that bucket is left at a safe height to reduce bending or over reaching
- Operator to utilise hand rails and steps to enter and leave the cab safely
- Operator to ensure that hydraulic control isolation lever is engaged before leaving the cab to change Quick Hitch
- Specific Quick Hitch Training is provided for every Lynch Plant Operator
- Prohibition of any Site Worker in risk area of excavator, defined as area underneath the bucket
- Quick Hitch Operator Manual in cab of machine to be followed at all times

### IDENTIFIED RISKS

The SSOW above has been compiled after identifying the following risks from this activity

- Machine dipper arm striking site worker
- Bucket / Attachment detaching from Quick Hitch and striking an operative
- Bucket “swing back” when Quick Hitch released
- Caught fingers / hand in Quick Hitch
- Upper limb strains from disengaging Quick Hitch
- Falls from cab
- Unauthorised operation of plant while changing quick hitch

**FOR MORE INFORMATION PLEASE REFER TO RISK ASSESSMENT 14**

### PPE TO BE WORN

For this activity, the following PPE must be worn

- High-vis Vest / Jacket
- Safety Boots
- Safety Helmet



### SAFE SYSTEM OF WORK

- Some machines/vehicles are fitted with limited integral fall protection measures
- Mobile Steps are to be fitted with guardrails
- Avoid work at height where possible
- Prevent falls by using suitable working platforms with integral edge protection and toe boards which conform to the Work at Height Regulations
- All personnel to be competent in work at height procedures
- Provide access scaffolding, mobile towers or podium steps before using ladders or step ladders
- Work off ladders only in areas where site conditions cannot be altered and other platforms cannot be used because space is restricted
- Any work off ladders to be of short duration (max 30 mins in 1 position) and light in nature (max 10kgs)
- No working from the top 3 steps
- Maintain 3 points of contact at all times when on ladders
- All ladders to be Class 1 and conform to BS EN 131
- Inspect ladders before use
- Surfaces to be firm, level, dry, clear of obstructions
- Ladder locking devices to be engaged at all times
- No side on working or loading
- No over-reaching in any direction

### IDENTIFIED RISKS

The SSOW above has been compiled after identifying the following risks from this activity

- Falls of people from height from lorry bed, plant machines or when working from mobile steps, towers or ladders
- Falls of objects or materials from height as above

**FOR MORE INFORMATION PLEASE REFER TO RISK ASSESSMENT 20**

# RISK ASSESSMENT - MANUAL HANDLING

Project	Workshop Operations	RA No:	11	Review Date
Operation/Task	Manual Handling	Persons at risk	Employees	One year from manual issue date
Location/Area:	Parr Road Depot, Construction Sites	Public at risk	No	

KEY:	S = Severity Rating	L = Likelihood of Occurrence	RR = Risk Rating						
			5	4	3	2	1		
1. Negligible	1. Improbable		5	4	3	2	1	R	Unacceptable risk, plan out or add further controls
2. Minor Injury	2. Remote 1 - 10%		4	3	2	1	O	Acceptable only if no other method viable and with high level controls in place	
3. Major Injury (RIDDOR)	3. Possible 10 - 50%		3	2	1		Y	Acceptable with suitable controls	
4. Fatality	4. Probable 50 - 90%		2	1			G	Acceptable, no further action required	
5. Multiple Fatality	5. Almost certain 90%+		1						
			1	2	3	4	5		
			Likelihood						

Activity	Hazards/Risks Identified	Risk Rating		Control Measures	Residual Risk		Responsibility	Monitoring Responsibility
		S	L		S	L		
Lifting, Pushing, Pulling, Carrying of loads	Musculoskeletal injuries caused by crushing, cuts, over exertion, insufficient strength capability, poor environmental conditions or poor organisational factors	3	4	12	3	2	6	
				<p>All employees to be trained in manual handling techniques</p> <p>Manual handling tasks to be assessed</p> <p>Use mechanical aids wherever possible</p> <p>Employ team lifting wherever possible to lessen the individual load</p> <p>Consider workplace layout and organisation to minimise manual handling</p> <p>All staff to be physically fit to undertake manual handling tasks</p> <p>Provide information, training, instruction and supervision to employees for manual handling tasks</p> <p>Ensure loads are stacked at the correct height to be lifted safely</p> <p>Keep walkways clear of obstructions</p> <p>Ensure flooring in conducive to safe manual handling</p> <p>Ensure sufficient lighting is provided to aid safe manual handling</p> <p>PPE (safety boots, gloves) to be worn where required</p>				

Risk Assessment Prepared by	Stephen Bremner	Sign:		Date:	01/06/14
Risk Assessment Approved by	Mark Kennedy	Sign:		Date:	01/06/14

# RISK ASSESSMENT - QUICK HITCH ATTACHMENTS

Project	Workshop/Yard/Site Operations	RA No:	14	Review Date
Operation/Task	Use of Quick Hitch Systems to change attachments on Plant machines	Persons at risk	Operators, Banksmen, Operatives	One year from manual issue date
Location/Area:	Parr Road Depot	Public at risk	No	

KEY:	S = Severity Rating	L = Likelihood of Occurrence	RR = Risk Rating					Risk	Control Measures	Residual Risk		Responsibility	Monitoring Responsibility
			5	4	3	2	1			S	L		
1. Negligible	1. Improbable		5	4	3	2	1						
2. Minor Injury	2. Remote 1 - 10%		10	8	6	4	2						
3. Major Injury (RIDDOR)	3. Possible 10 - 50%		15	12	9	6	3						
4. Fatality	4. Probable 50 - 90%		20	16	12	8	4						
5. Multiple Fatality	5. Almost certain 90%+		25	20	15	10	5						

Activity	Hazards/Risks Identified	Risk Rating		Control Measures	Residual Risk		Responsibility	Monitoring Responsibility	
		S	L		RR	S			L
Use of Quick Hitch Systems to change attachments on Plant machines	Machine dipper arm striking site worker Bucket / Attachment detaching from Quick Hitch and striking an operative Bucket "swing back" when Quick Hitch released Caught fingers / hand in Quick Hitch Upper limb strains from disengaging Quick Hitch Falls from cab Unauthorised operation of plant while changing Quick Hitch	4	3	12	4	2	8	Operators Site Based Client Managers Fitters	Operators Site Based Client Managers and Foremen or Supervisors



# RISK ASSESSMENT - QUICK HITCH ATTACHMENTS (CONT.)

Project	Workshop/Yard/Site Operations	RA No:	14	Review Date
Operation/Task	Use of Quick Hitch Systems to change attachments on Plant machines	Persons at risk	Operators, Banksmen, Operatives	One year from manual issue date
Location/Area:	Parr Road Depot	Public at risk	No	

KEY: S = Severity Rating	L = Likelihood of Occurrence	RR = Risk Rating		
1. Negligible	1. Improbable	5 10 15 20 25	R	Unacceptable risk, plan out or add further controls
2. Minor Injury	2. Remote 1 - 10%	4 8 12 16 20	O	Acceptable only if no other method viable and with high level controls in place
3. Major Injury (RIDDOR)	3. Possible 10 - 50%	3 6 9 12 15	Y	Acceptable with suitable controls
4. Fatality	4. Probable 50 - 90%	2 4 6 8 10	G	Acceptable, no further action required
5. Multiple Fatality	5. Almost certain 90%+	1 2 3 4 5		
		Likelihood		

Activity	Hazards/Risks Identified	Risk Rating		Control Measures	Residual Risk		Responsibility	Monitoring Responsibility	
		S	L		RR	S			L
Use of Quick Hitch Systems to change attachments on Plant machines	Machine dipper arm striking site worker Bucket / Attachment detaching from Quick Hitch and striking an operative Bucket "swing back" when Quick Hitch released Caught fingers / hand in Quick Hitch Upper limb strains from disengaging Quick Hitch Falls from cab Unauthorised operation of plant while changing quick hitch	4	3	12	4	2	8	Operators Site Based Client Managers Fitters	Operators Site Based Client Managers and Foremen or Supervisors

Risk Assessment Prepared by	Liam Moore	Sign:		Date:	01/06/14
Risk Assessment Approved by	Mark Kennedy	Sign:		Date:	01/06/14



# RISK ASSESSMENT - LOADING AND UNLOADING OF PLANT TRANSPORTERS

Project	Workshop/Yard/Site Operations	RA No:	21	Review Date
Operation/Task	Loading & Unloading of Plant Transporters	Persons at risk	Drivers, Workers,	One year from manual issue date
Location/Area:	Lynch Depots / Customers Construction Sites/Public Highway	Public at risk	Yes	

KEY:	S = Severity Rating	L = Likelihood of Occurrence	RR = Risk Rating						
			5	4	3	2	1		
	1. Negligible	1. Improbable	5	4	3	2	1		
	2. Minor Injury	2. Remote 1 - 10%	10	8	6	4	2		
	3. Major Injury (RIDDOR)	3. Possible 10 - 50%	15	12	9	6	4		
	4. Fatality	4. Probable 50 - 90%	20	16	12	8	5		
	5. Multiple Fatality	5. Almost certain 90%+	25	20	15	10	5		

Activity	Hazards/Risks Identified	Risk Rating			Control Measures	Residual Risk			Responsibility	Monitoring Responsibility
		S	L	RR		S	L	RR		
Loading & Unloading of Plant Transporters	Falls of people or objects from the transporter load bed and ramps Falls of vehicles from the transporter load bed and ramps Slips & Trips Personnel being struck by moving or falling vehicles Electrocution from contact with overhead power cables Hand injuries	4	4	16	Load bed and ramps to be kept free of debris, mud, oil, grease, waste, ice etc which could cause slippage of people or machines. Sand to be spread where necessary to aid grip. Tracks/Wheels of plant to be cleaned if necessary before loading. Lashing chains, slings, timber, ropes etc to be stowed safely when not in use so as not to create trip or falling hazards. Maintain 3 points of contact if possible when working near the edge of the load bed. Access to Transporters is limited to competent, authorised personnel. Staff to follow safe loading procedures in Transport Safety Manual when loading/unloading. Plant to be secured to Transporters as per manufacturer's procedures and Transport Safety Manual procedures and guidance.	4	2	8	Drivers Plant Operators Transport Managers	Transport Managers Customers site supervisors

# LOADING AND UNLOADING OF PLANT TRANSPORTERS (CONT.)

Project	Workshop/Yard/Site Operations	RA No:	21	Review Date
Operation/Task	Loading & Unloading of Plant Transporters	Persons at risk	Drivers, Workers	One year from manual issue date
Location/Area:	Lynch Depots / Customers Construction Sites/Public Highway	Public at risk	Yes	

KEY:	S = Severity Rating	L = Likelihood of Occurrence	RR = Risk Rating								
			5	4	3	2	1				
	1. Negligible	1. Improbable	5	5	10	15	20	25	R	Unacceptable risk, plan out or add further controls	
	2. Minor Injury	2. Remote 1 - 10%	4	4	8	12	16	20	O	Acceptable only if no other method viable and with high level controls in place	
	3. Major Injury (RIDDOR)	3. Possible 10 - 50%	3	3	6	9	12	15	Y	Acceptable with suitable controls	
	4. Fatality	4. Probable 50 - 90%	2	2	4	6	8	10	G	Acceptable, no further action required	
	5. Multiple Fatality	5. Almost certain 90%+	1	1	2	3	4	5			
			1	1	2	3	4	5			
			Likelihood								

Activity	Hazards/Risks Identified	Risk Rating		Control Measures	Residual Risk		Responsibility	Monitoring Responsibility	
		S	L		RR	S			RR
Loading & Unloading of Plant Transporters	Falls of people or objects from the transporter load bed and ramps Falls of vehicles from the transporter load bed and ramps Slips & Trips Personnel being struck by moving or falling vehicles Electrocution from contact with overhead power cables Hand injuries	4	4	16	4	2	8	Drivers Plant Operators Transport Managers	Transport Managers Customers site supervisors

# LOADING AND UNLOADING OF PLANT TRANSPORTERS (CONT.)

Project	Workshop/Yard/Site Operations	RA No:	21	Review Date
Operation/Task	Loading & Unloading of Plant Transporters	Persons at risk	Drivers, Workers	One year from manual issue date
Location/Area:	Lynch Depots / Customers Construction Sites/Public Highway	Public at risk	Yes	

KEY:	S = Severity Rating	L = Likelihood of Occurrence	RR = Risk Rating								
			5	4	3	2	1				
	1. Negligible	1. Improbable	5	5	10	15	20	25	R	Unacceptable risk, plan out or add further controls	
	2. Minor Injury	2. Remote 1 - 10%	4	4	8	12	16	20	O	Acceptable only if no other method viable and with high level controls in place	
	3. Major Injury (RIDDOR)	3. Possible 10 - 50%	3	3	6	9	12	15	Y	Acceptable with suitable controls	
	4. Fatality	4. Probable 50 - 90%	2	2	4	6	8	10	G	Acceptable, no further action required	
	5. Multiple Fatality	5. Almost certain 90%+	1	1	2	3	4	5			
			1	1	2	3	4	5			
			Likelihood								

Activity	Hazards/Risks Identified	Risk Rating		Control Measures	Residual Risk		Responsibility	Monitoring Responsibility	
		S	L		RR	S			L
Loading & Unloading of Plant Transporters	Falls of people or objects from the transporter load bed and ramps  Falls of vehicles from the transporter load bed and ramps  Slips & Trips  Personnel being struck by moving or falling vehicles  Electrocution from contact with overhead power cables  Hand injuries	4	4	16	4	2	8	Drivers Plant Operators Transport Managers	Transport Managers Customers site supervisors

Risk Assessment Prepared by	Stephen Bremner (Group Transport and Service Manager)	Sign:		Date:	01/06/14
Risk Assessment Approved by	Mark Kennedy (Operations Director)	Sign:		Date:	01/06/14

# RISK ASSESSMENT - USE OF HIAB LORRIES

Project	Workshop/Yard/Haulage & Transport Operations	RA No:	22	Review Date	
Operation/Task	Use of Hiab Lorries	Persons at risk	Drivers/Customers	One year from manual issue date	
Location/Area:	Lynch Depots /Customer Sites/ Public Highway/Landfill sites	Public at risk	Yes		

KEY:	S = Severity Rating	L = Likelihood of Occurrence	RR = Risk Rating								
	1. Negligible	1. Improbable	5	5	10	15	20	25	R	Unacceptable risk, plan out or add further controls	
	2. Minor Injury	2. Remote 1 - 10%	4	4	8	12	16	20	O	Acceptable only if no other method viable and with high level controls in place	
	3. Major Injury (RIDDOR)	3. Possible 10 - 50%	3	3	6	9	12	15	Y	Acceptable with suitable controls	
	4. Fatality	4. Probable 50 - 90%	2	2	4	6	8	10	G	Acceptable, no further action required	
	5. Multiple Fatality	5. Almost certain 90%+	1	1	2	3	4	5			
			1	1	2	3	4	5			
			Likelihood								

Activity	Hazards/Risks Identified	Risk Rating		Control Measures	Residual Risk		Responsibility	Monitoring Responsibility	
		S	L		RR	S			LR
LIFTING WITH CRANE	Overtum of vehicle during loading or unloading operations due to excessive loads or unstable ground Crushing/collision between load, personnel or site vehicles Falls from height of operator or materials forming the load Electrocution from contact with overhead cables Bridge strikes or striking overhead structures	4	4	16	4	2	8	Transport Haulage Manager Transport Supervisor	Transport Haulage Manager

# USE OF HIAB LORRIES (CONT.)

Project	Workshop/Yard/Haulage & Transport Operations	RA No:	22	Review Date
Operation/Task	Use of Hiab Lorries	Persons at risk	Drivers/Customers	One year from manual issue date
Location/Area:	Lynch Depots /Customer Sites/ Public Highway/Landfill sites	Public at risk	Yes	

KEY:	S = Severity Rating	L = Likelihood of Occurrence	RR = Risk Rating								
	1. Negligible	1. Improbable	5	5	10	15	20	25	R	Unacceptable risk, plan out or add further controls	
	2. Minor Injury	2. Remote 1 - 10%	4	4	8	12	16	20	O	Acceptable only if no other method viable and with high level controls in place	
	3. Major Injury (RIDDOR)	3. Possible 10 - 50%	3	3	6	9	12	15	Y	Acceptable with suitable controls	
	4. Fatality	4. Probable 50 - 90%	2	2	4	6	8	10	G	Acceptable, no further action required	
	5. Multiple Fatality	5. Almost certain 90%+	1	1	2	3	4	5			
			1	1	2	3	4	5			
			Likelihood								

Activity	Hazards/Risks Identified	Risk Rating		Control Measures	Residual Risk		Responsibility	Monitoring Responsibility	
		S	L		RR	S			RR
LIFTING WITH CRANE	Overturn of vehicle during loading or unloading operations due to excessive loads or unstable ground Crushing/collision between load, personnel or site vehicles Falls from height of operator or materials forming the load Electrocution from contact with overhead cables Bridge strikes or striking overhead structures	4	4	16	4	2	8	Transport Haulage Manager Transport Supervisor	Checks will be carried out by Lynch Plant Hires H&S Team on random selection This is too ensure all SSOW are followed correctly

Risk Assessment Prepared by	Stephen Bremner (Group Transport and Service Manager)	Sign:	Date:	01/06/14
Risk Assessment Approved by	Mark Kennedy (Operations Director)	Sign:	Date:	01/06/14



# **LYNCH**

**MEETING HIRE DEMANDS**

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