

# LANTERN MAGIC YARD RAMP

## OPERATING AND MAINTENANCE INSTRUCTIONS

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# Introduction

Thank you for purchasing or hiring a Lantern Ramp. For trouble free operation the following instructions should be read and complied with.



## Loading and unloading the ramp from the vehicle.

For loading the ramp onto a vehicle, the following procedure applies:

- Lift the Ramp by using two forklift trucks (one either side of the vehicle) or an overhead crane. The centre of the Ramp is marked with yellow paint.
- The vehicle should then be backed under the Ramp until the full length of the Ramp will lie on the vehicle; the higher end positioned at the rear end of the vehicle.
- The Ramp should then be lowered and secured to the vehicle before moving.

For unloading the Ramp, the reverse procedure applies.

## Towing the Ramp into position.

Towing the Ramp into position must be carried out using the removable central rear towing bracket (see Figure 1). Any other method may result in damage to the Ramp. An optional towing attachment can be supplied for fitting to the truck forks.

- Connect the towing bracket to the lower end of the Ramp by inserting the pin provided.
- After towing the Ramp into position, the towing bracket must be removed before using the Ramp.
- Please note the towing bracket MUST NOT be used as a lifting point.
- Towing speed is recommended to be less than 4 miles per hour.

### ***Towing Eye***



Figure 1

# Operating Instructions.

## IMPORTANT NOTICE – UNDERCARRIAGE

The wheels and undercarriage on the Ramp are designed for moving the Ramp and to support the weight of the Ramp only when not in use.

Before use, it is extremely important that the wheels and undercarriage are raised clear of the ground by 75 to 100mm (3" to 4") as shock loads to the lifting legs could damage the undercarriage gearbox.

## Setting the Ramp to a Vehicle.

- When the Ramp is in use, the lower (entry) end must be positioned on firm ground and the raised end positioned on the vehicle or container to be loaded or unloaded.
- Extend the Ramp legs (see page 7) to raise the Ramp upper end to enough height above the vehicle platform height.
- Manoeuvre the vehicle into position under the Ramp.
- The Ramp can then be lowered into position making sure the wheels are raised clear of the ground by 75-100mm (3"-4").

**IMPORTANT:** Ensure that all the front lead-in tongue is resting on the base of the vehicle.

## Securing the Ramp to a vehicle.

Before using the Ramp, the two safety chains or web strapping fitted at the raised end of the Ramp must be attached by the hooks to the vehicle or container before the Ramp is used (see Figure 2). These chains or straps are a safety measure to prevent the Ramp and the vehicle moving apart. Remove excess chain by locking into position and excess strapping by tightening.

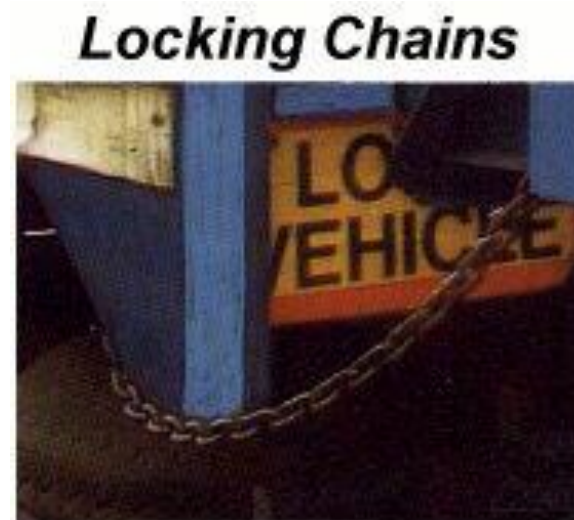


Figure 2

## Mounting Information

Before mounting raise both legs fully. This will ensure that the legs are synchronised and will not create a situation where one leg experiences the total load thereby causing damage to the leg.

These landing legs are not to be attached to a lubricant system.

The landing gear must be mounted parallel to each other and perpendicular to the ground to provide the optimal life capacity at the rated handle torque.

**DO NOT WELD THE CROSS SHAFT TO THE LANDING GEAR SHAFT.** Bolts and nuts used to attach the cross shaft should not be overtightened to prevent lateral movement of the cross shaft.



Figure 3



# Operation of undercarriage legs.

## To extend

1. Block the trailer tyres.
2. Remove the handle from the holder and engage on shaft.
3. Engage high gear and extend until contact with the ground is made.
4. To reduce load on the fifth wheel, engage low gear and crank 4 to 8 turns.
5. Disengage the handle and store in holder.

**IMPORTANT:** DO NOT ATTEMPT TO CRANK PAST STOP.

## To retract

1. Remove the handle from the holder and engage on shaft.
2. Engage low gear until unloaded, then use high gear until fully retracted.
3. Disengage the handle and store in holder.

**IMPORTANT:** DO NOT ATTEMPT TO CRANK PAST STOP.

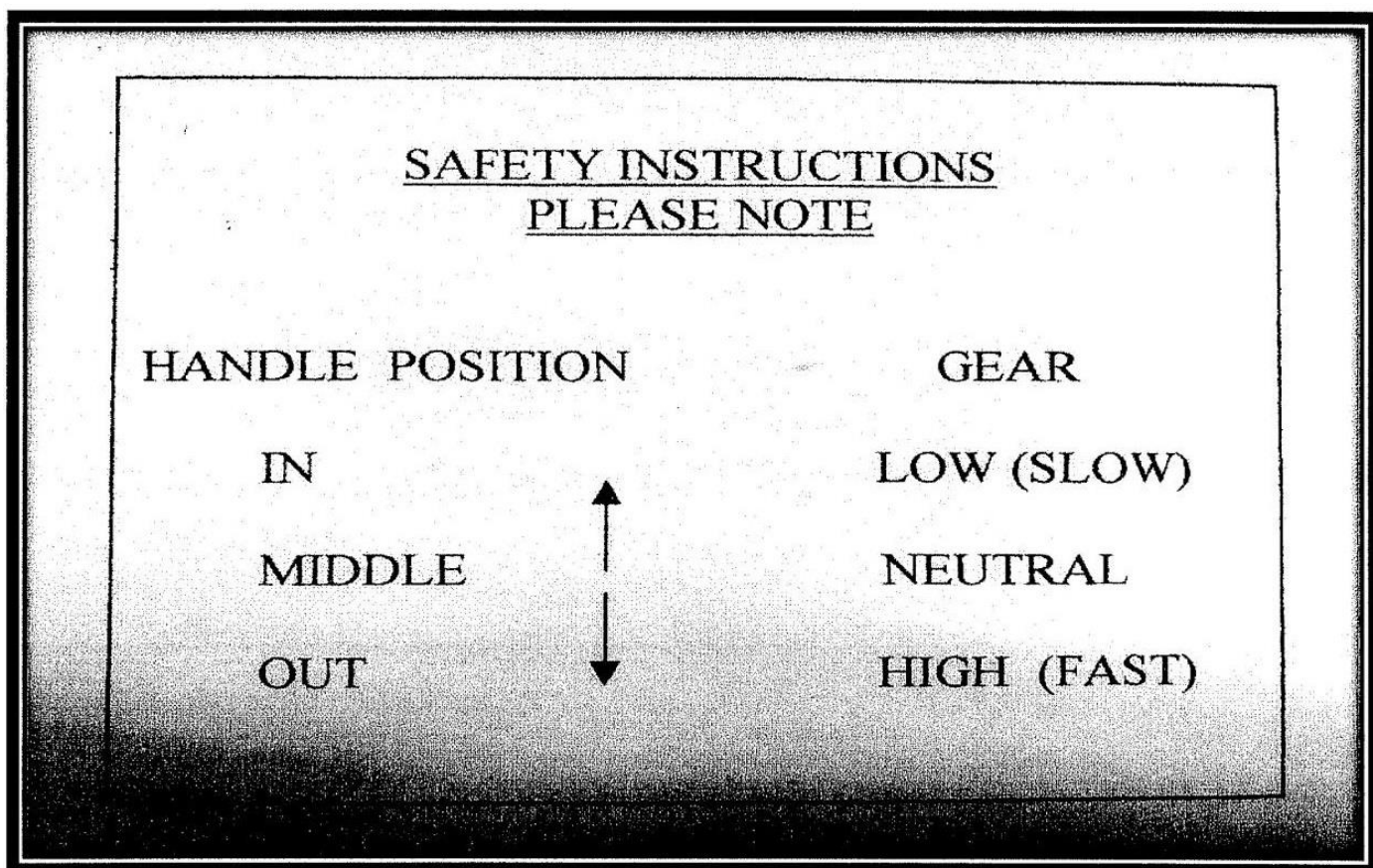
## Operation of undercarriage legs (continued).

For safety reasons and to eliminate damage to the undercarriage gearbox, please note the following instructions:

To raise the Ramp legs, push the operating handle in.

To lower the Ramp legs, pull the operating handle out.

When the Ramp is not in use, make sure the handle is in neutral.



# Special Notice & Gearbox maintenance information.

## **Special Notice:**

For operation of landing gear sets with two 2-speed landing gears, it is recommended that only one operator crank the unit when used.

With this system, the offside landing gear must be placed in the neutral position before cranking.

## **Maintenance Information:**

Older Euro Hitch landing gears are greased and packed with high quality lubricants when manufactured. It is necessary, however, to periodically supplement this lubrication through the grease locations provided. This must be done a minimum of at least once per year. Extreme pressure lubricants (EP) with MoS<sub>2</sub> or Graphite are recommended.

Universal Components landing gears are a sealed unit and do not need greasing.

During every vehicle inspection the landing gear should be inspected for worn or damaged parts and proper operation.

## Using the Ramp

If the previous steps are followed the Ramp should be ready for the loading and unloading of vehicles (see Figure 4).

**IMPORTANT:** When approaching the Ramp with a forklift truck ensure that the forks are raised and tilted back sufficiently to clear the mesh floor.

Always observe good forklift truck driving practice: always at a sensible speed.

The total safe working load of a Ramp is either 10 tonnes for a standard ramp or 15 tonnes for a heavy-duty ramp.



Figure 4

## Maintenance of the Ramp

For optimum performance of the Ramp, the following maintenance procedures should be carried out:

### Monthly:

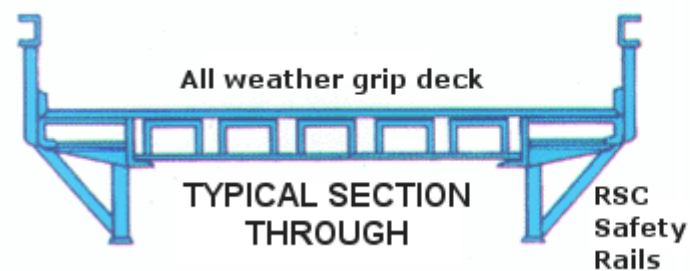
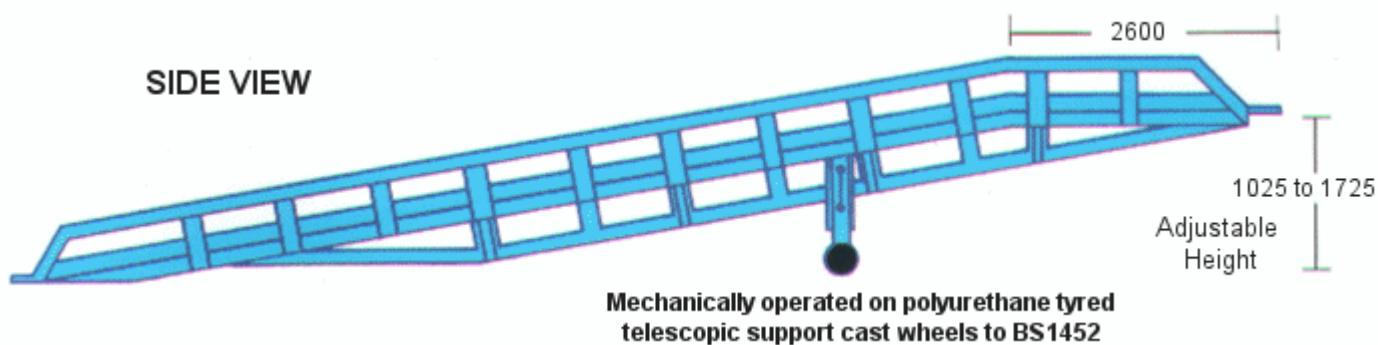
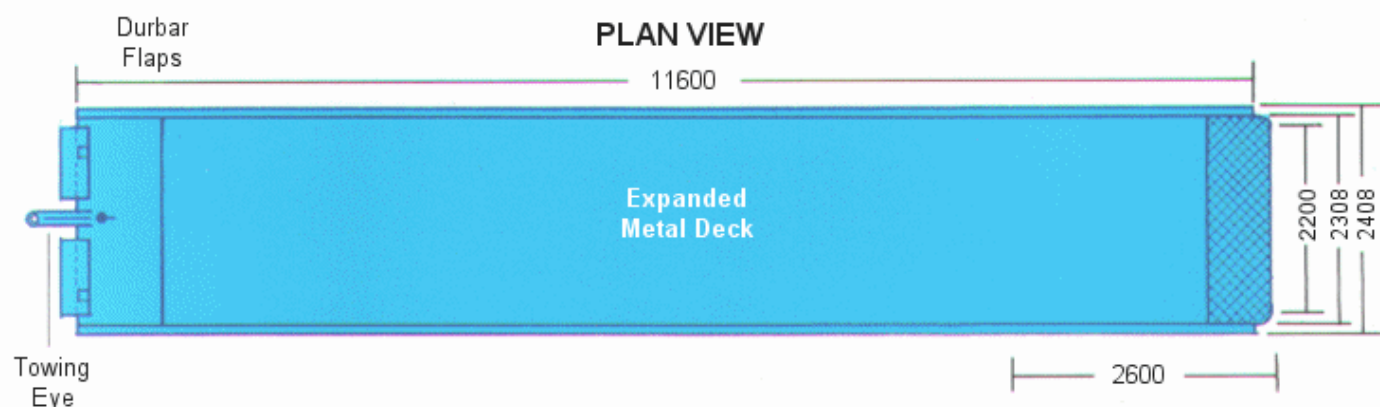
Check for loose nuts and bolts; check the towing bracket and chains or web strapping for damage.

### 6 months minimum:

Lubricate the undercarriage gearbox (if required) in accordance with the instructions given on page 9.

Lantern Ramps Limited will be happy to supply a competitive maintenance quotation.

# Ramp Specifications.



**Notes :**

1. Material: Mild Steel Grade BSEN 10025 FE43A.
2. Finish: Azure Blue Gloss.
3. Dimensions in mm approximate for guidance only.
4. Drawings not to scale.

## LANTERN MAGIC RAMP "FULL WIDTH RAMP" SPECIFICATIONS

	<b>Standard 10 T. Ramp</b>	<b>Heavy Duty 15 T. Ramp</b>
Safe working load	10,000 kg	15,000 kg
Total weight of ramp	3,500 kg	6,000 kg
Total length of ramp	11,600 mm	11,600 mm
Total width of ramp	2,408 mm	2860 mm
Usable width of ramp	2,308 mm	2710 mm
Side safety barriers	375 mm	600 mm
Adjustable height	1,075 – 1,725 mm	1200 - 1800 mm
Lip length into container	208 mm	208 mm
Straight level into container	2,600 mm	2600 mm
Structure	Steel	Steel
Tyres	Polyurethane	Solid Rubber
Paint finish	Aircraft blue gloss	Aircraft blue gloss
Height adjustment	mechanical	mechanical
Decking	Expamet expanded metal	Expamet or Durbar plate