Treka Routine Maintenance Instructions

Overview....3

Saloon Heating/Cooling System....3

Fold Out Side Step *(Mobility+ vehicles only)*....3

Rear Door Hinges *(Mobility+ vehicles only)*....3

Fire Extinguishers....3

Passenger Lift....4

Glass Roof Hatch....4

NMI Millock Fittings....5

TDS Door – Maintenance Guidelines....6

TDS Door – Glider Assembly....8

Phoenix Seating – Maintenance Guidelines....9

AVS Step – Maintenance Guidelines....10

Appendix 1 - Guidelines for Tail Lift Operators

Overview

This document is intended to act as a guide to the routine operator maintenance that needs to be undertaken in relation to the Treka minibuses and the major ancillary components fitted to it.

This document does not include any of the base vehicle maintenance requirements nor any driver's daily checks or any operator specific requirements.

The contents are not exhaustive and do not replace the component manufacturers service and maintenance requirements and are not mandatory unless otherwise stated, but failure to carry out the work may invalidate the vehicle and or component warranty.

Please consult your Treka Bus 7-Year Warranty Summary for the component manufacturers servicing and maintenance requirements.

Saloon Heating/Cooling System

Other than the manufacturers service requirements there are no other checks that need to be undertaken by the vehicle operator. Please refer to the saloon heating/cooling manufacturers manual (supplied with your vehicle at delivery) for further information.

Fold Out Side Step *(Mobility+ vehicles only)*

The side step should be brushed out on a regular basis and the piano hinge lightly lubricated on a quarterly basis.

Rear Door Hinges *(Mobility+ vehicles only)*

It is recommended that the rear door hinges be lightly lubricated with WD40 or an equivalent lubricant on a quarterly basis. No other maintenance is required.

Fire Extinguishers

It is recommended that a weekly visual check is carried out as follows:

- Ensure they're unobstructed and visible
- Check that it has clean and legible operating instructions facing outward
- Ensure it has not been operated and is not obviously damaged or any parts missing
- Ensure the pressure gauge reads in the operable and safe range
- Ensure the seals and/or tamper indicators are not broken/missing

Passenger Lift

All lift manufacturers recommend regular lift maintenance; this may include monthly, quarterly, bi-annual or annual maintenance. The working life of your lift will be greatly prolonged if these recommendations are adhered to.

For exact maintenance requirements for the make and model of lift fitted to your vehicle please consult the manufacturers documentation supplied with your vehicle.

IF IN DOUBT CONTACT THE MANUFACTURER.

Notes on Tail Lift Guidance

As an operator of a passenger lift you have very specific legal obligations in relation to the maintenance of the lift and the keeping of maintenance records.

As a minimum you are required to ensure that each lift is given a thorough examination (STE) at least every 6 months and records kept for at least 2 years.

It is recommended that each lift is also serviced and a weight test carried out at the same time as the thorough examination is carried out.

Please see the attached appendix Guidelines for Tail lift Operators.

Glass Roof Hatch

The tightness of the roof hatch handle-to-frame bolts need to be checked at least once every 3 months.

There are 4 bolts in total, two either side as shown below:

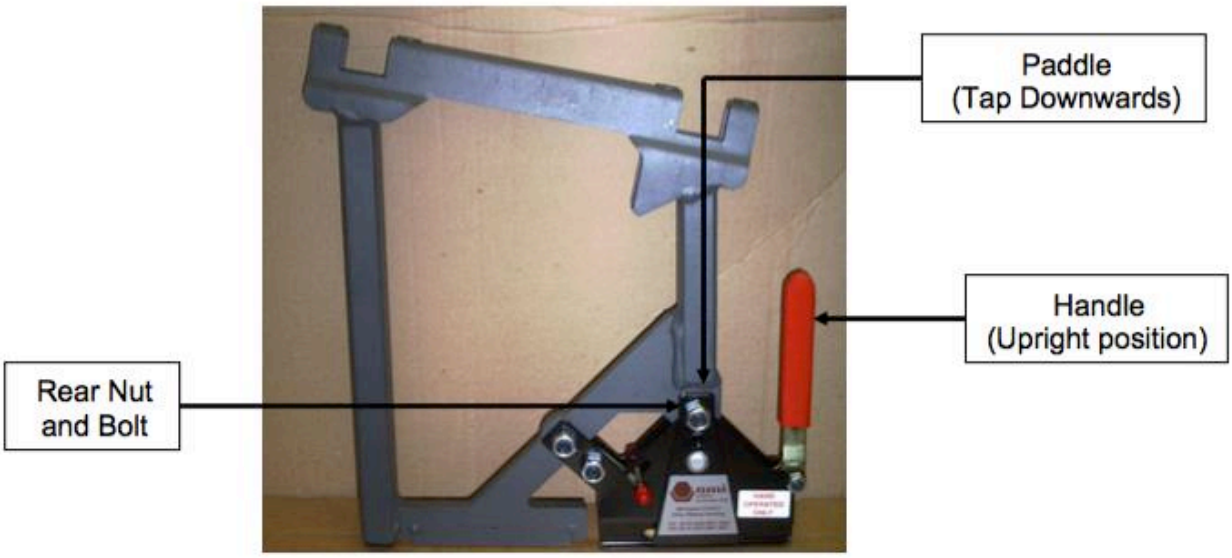
The correct torque setting is: 17ft/lbs (23Nm)

The bolts should not be over tightened as this could lead to over stiffness in operation, which in turn could lead to damage to the roof hatch.

Failure to maintain the correct torque for these bolts could lead to the bolts becoming loose and eventually coming out completely which would result in the glass hatch panel becoming detached from the frame.

NMI Millock Fittings

It is recommended that the Millock fittings moving parts are lightly lubricated with WD40 or an equivalent lubricant on a quarterly basis and that seats are checked for rocking and any movement adjusted as follows:



Step 1

Loosen the nut and bolt on the rear leg which holds the fitting, but ensure the nut and bolt remain under slight tension.

Step 2

Use a cold chisel to tap the paddle down on both sides of the leg.

Step 3

Place leg in track and push red handle into the upright position (not all the way). Tighten nut and bolt on the rear using a torque wrench to 65Nm.

Step 4

Test adjustment by placing leg in track and locking Millennium leg fittings (this time push red handle all the way forward) if the fitting appears loose in the track repeat the procedure making sure the paddles are tapped down to their further most point. Also when re-tightening the nut and bolt ensure red handle has not been pushed past the upright position prior to being fastened in place by tightening the nut and bolt.

TDS Door – Maintenance Guidelines

Daily Checks

- Operate the doors to check satisfactory operation of all open and close buttons located in the driver's console, internally above/below the entryway and those positioned externally.

- Operate the doors to check alignment and satisfactory operation.

Service Inspection Guide
A full service and inspection should be carried out at 6 months, then annually thereafter. These same checks should be carried out when replacing defective/damaged parts.

Full guidelines for service and inspection are included on the next page.

It is important that any components found to be damaged or defective are replaced as soon as possible. Failure to do so could result in further damage to other components.

BASIC DOOR SYSTEM CHECK GUIDELINES

TREKA-GLD042 RH SINGLE GLIDER ELECTRIC DOOR SYSTEM

These doors are designed for ease of use and operation. The amount of moving parts has been kept to an absolute minimum, thus reducing the levels maintenance required. The following guidelines are our recommended minimum level of service / inspection.

☐ **Service-Inspection Time Guide**: 1st Check at 6 months then annually thereafter or when replacing a defective/damaged part. **It is important that any components found to be damaged or defective at any time are replaced or repaired as soon as possible. Failure to do so could result in further damage to other components or loss of door operation.**

☐ Manually open and close the door via slide clutch,
- Checking that door is free running.
- Ensure that Aperture seals, Nosing rubber, Door active flaps & Bottom guide pin are not restricting door movement.
- Checking slide clutch is engaging with door in the fully closed position against aperture seals.
- Adjust spring tension to suit operation if required (see details for standard setting).

☐ Check door-guide roller/spindle for clearance gap (3mm) and free movement in the integral track on underside of shelf-plate are dry and free from grease and the spindle is fully secured correctly.

☐ Check that all fasteners and bolts on door-leaves and shelf-plate are fully secured.

☐ Check all electrical connections, ensure cables are not snagging when manually opening door.

☐ Visually check all aperture seals, door frame & nosing rubber, handles, door-shaft for any damage and are secured correctly.

☐ Pivot & Bearings **Lubrication** as required.

☐ Check full function of lock system and **Lubrication** as required.

= Denotes Grease Lubrication.

= Denotes Wet Lubrication.

(Do Not Use WD40 Original for lubrication only use as cleaning agent)

☐ **Inner Sabot Cover**: To remove cover pop out plastic screw caps, using poz bit screw driver , slacking off screws, then pull up cover vertically to remove.

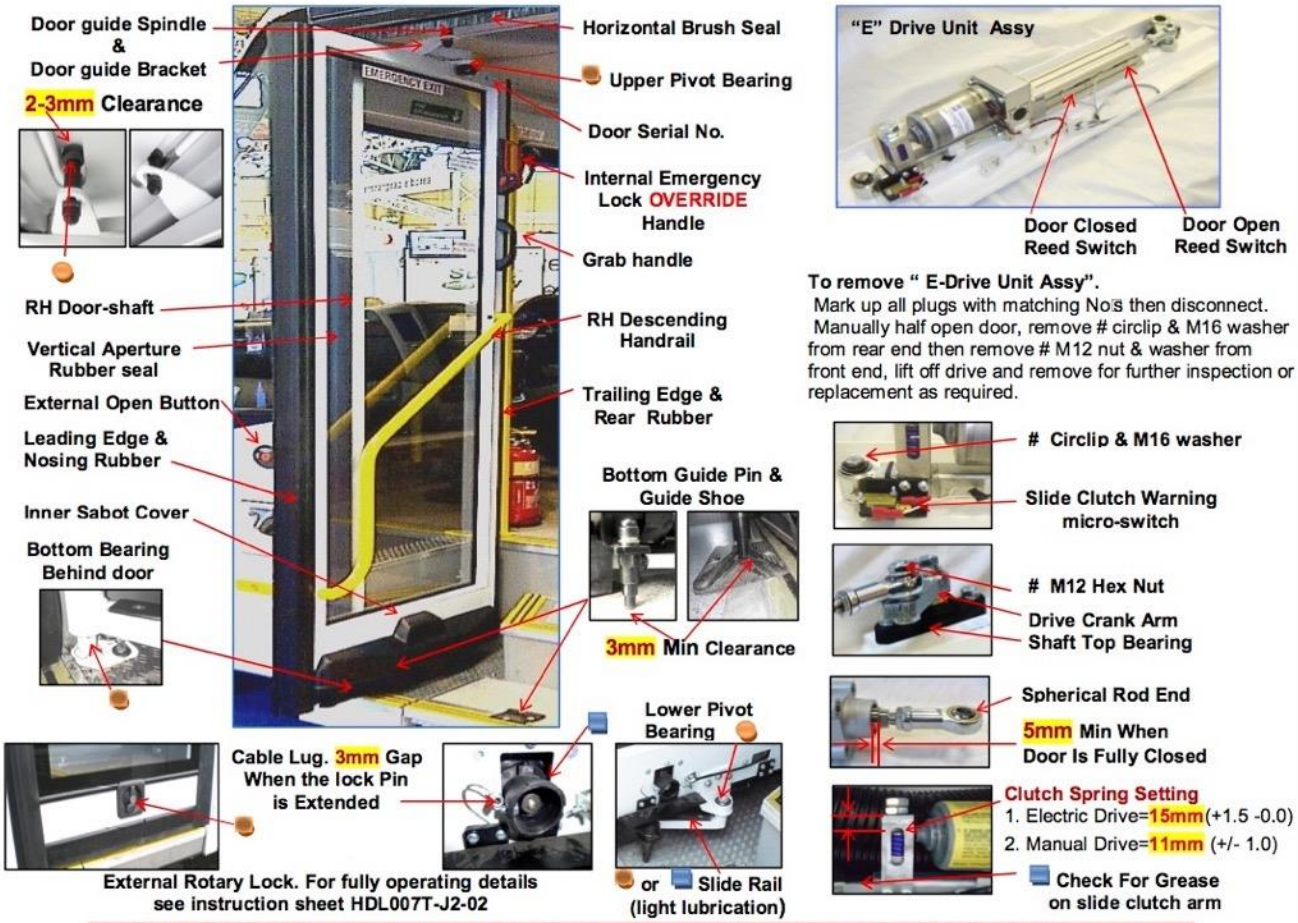
WITH POWER SUPPLY ON

☐ Operate the doors to check door alignment also with the door in the fully closed position against aperture seals and Door is fully open in a firm position. Adjust if necessary. (Note door guide spindle must be in the vertical position)

☐ Check the operation of the door using all open and close buttons located in the drivers console, above the doors and those positioned externally and hand brake interlock (auto close)

☐ Check reed-switch positions, with door closed and open position Adjust if necessary, with slide cutch fully engaged.

☐ Check step light active when operating door either by Manually or Electric drive method to fully open door.



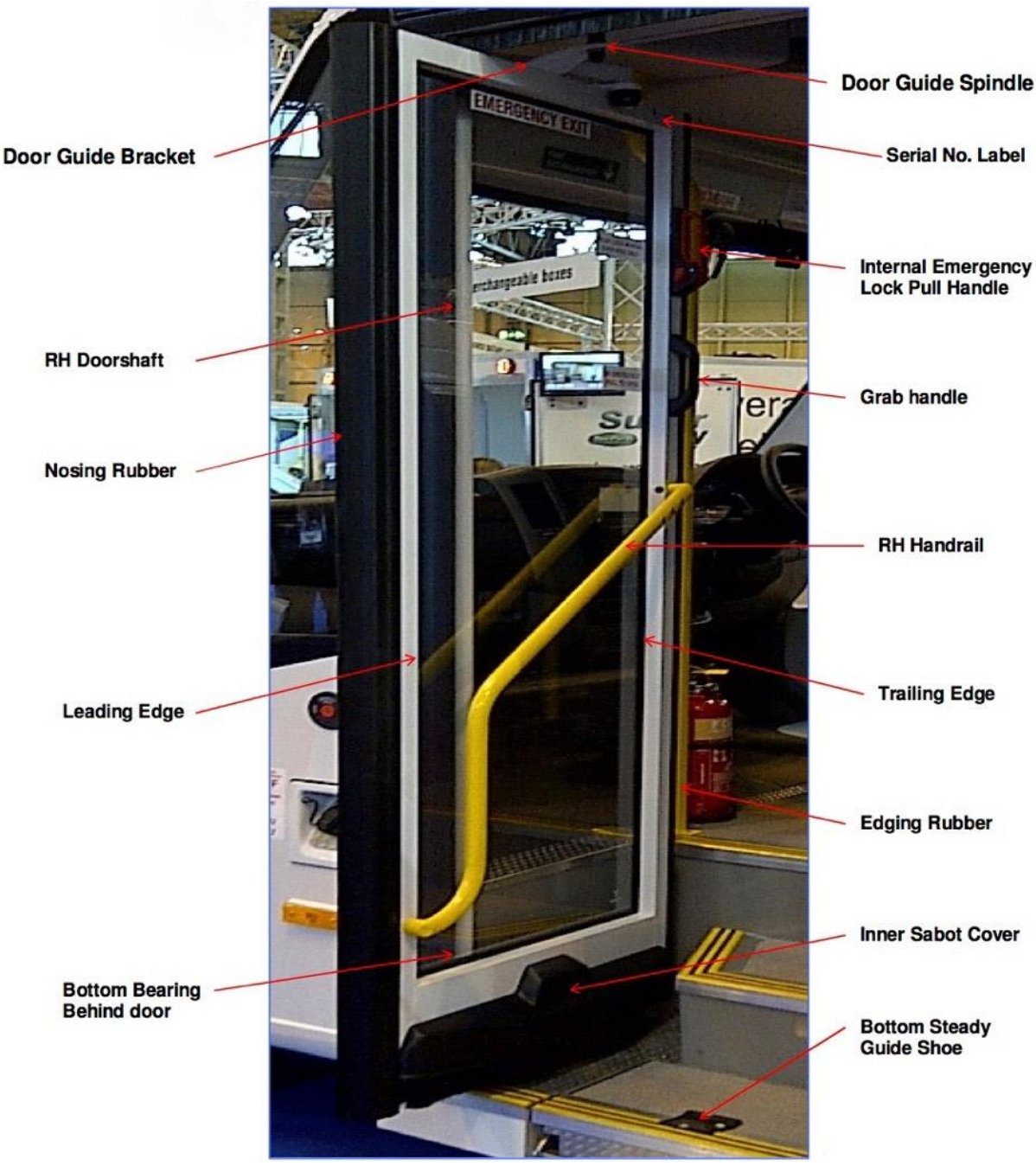
To remove " E-Drive Unit Assy".
Mark up all plugs with matching Nos then disconnect. Manually half open door, remove # circlip & M16 washer from rear end then remove # M12 nut & washer from front end, lift off drive and remove for further inspection or replacement as required.

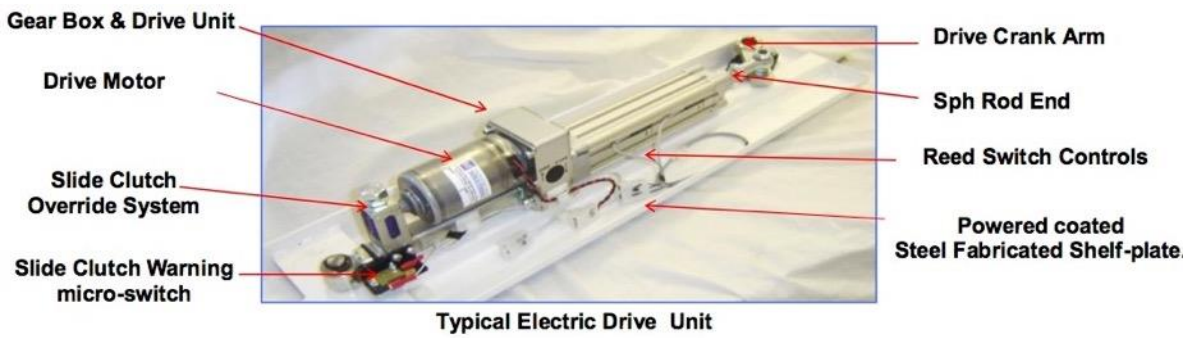
SAFETY NOTE: Before any checks are undertaken you may need to turn the power supply off to the door system via the circuit breaker switch if applicable. First, position door in the fully closed position.

TDS Door – Glider Assembly

Ordering of spare parts other than standard items involves quoting the door serial number, plus a brief description of the part and/or where it is located. The door serial number is written/stamped upon a Transport Door Solutions identification label located on the upper interior side of the door leaf.

Please note that when identifying door parts, LH and RH is viewed from inside the vehicle looking out.





Typical Electric Drive Unit

Phoenix Seating – Maintenance Guidelines

Maintenance of the Product
Safety belt assemblies are maintenance free, and have no user serviceable parts.

They should not be tampered with, lubricated or re-dyed, however if the webbing becomes soiled it may be cleaned with a non-detergent soap, rinsed in clean water, and allowed to dry naturally, not by artificial heat such as a hairdryer.

All safety belt assemblies including all fixing bolts and nuts should be replaced if in use during a crash/accident.

Assemblies should be regularly inspected by a qualified technician for damage, twists, frayed webbing and retractor function, and replaced if either damaged or improper operation is noted. Twists should be removed immediately.

Twisted Seat Belts
If one of the seat belts becomes twisted after use, there is a quick and easy way to untwist it without the use of any tools or taking the seat apart. To untwist your seat belt simply pull the seat belt out as far as it can, twist the seat belt at the top and feed the twist back through the escutcheon.

Watch a demonstration video of the untwisting of a seat belt on the website at:
www.phoenixseating.com/faqs-help

Testing/Checking the Product
Inertia reel seat belts can be checked for function by withdrawing the webbing from the retractor suddenly and quickly. The retractor will lock if the unit is operating correctly. The retractor will also lock if the vehicle is subjected to sudden braking or cornering, and may lock if parked on a slope.

General Storage & User Information
All seating fitted to Treka Bus vehicles have been designed, developed and manufactured for the intended sole purpose of users to sit on and are fit for purpose. When removed from a vehicle store seats in an upright position in a dry environment and where possible cover seats to prevent any damage.

Warning: Never stack seats on top of one another or stack other products on top of the seats to save storage space. Never open any packaging or covering using a sharp object, such as a blade or knife.

AVS Step – Maintenance Guidelines

Step Cleaning

Steps should be cleaned on a regular basis, particularly during winter months or when being operated in rural environments.

Should the step start to operate more slowly than usual or judder in operation this can be a sign that the step needs to be cleaned as described below.

By using a pressure washer or even a standard hose frequently you will ensure that no build up of debris can occur inside the step. The step will “self-clean” if the mud and dirt is lubricated with a power wash. After cleaning, the step should be allowed to dry. When the step has dried out apply silicone spray to lubricate the step.

DO NOT USE GREASE, avoid use of oil or WD 40, it will simply wash away. If the conditions are particularly bad daily cleaning may be required.

With your step fully stowed, pressure wash all around the inside of the case, washing the dirt to the back of the case.

Pay particular attention to the gaps between the tread and the case on both sides as indicated.

Fully deploy the step and repeat the process, washing debris out of the holes located at the rear of the case.

When your step has fully dried out silicone spray should then be applied to lubricate it.

6-Month Service Routine Checklist

1. Note serial number.
2. Remove step from vehicle (if appropriate) and unplug.
3. Remove cover.
4. Check/clean or replace as necessary any moving parts.
5. Clean side rails.
   NOTE: Cleaning is not covered by warranty.
6. Check nylon guide bolts for wear, replace as necessary.
7. Check operation of micro switches.
   NOTE: micro switch adjustment is not covered by warranty.
8. Check condition of all wires to switches and motor.
9. Check that all fixing brackets are secure and are in good condition.
10. Refit step (if removed, check operation, refit cover.
11. Where possible apply weight of 150kg to check step mountings.

This routine should take ~1 hour. Additional parts may be required and are available from AVS. Service costs and some service parts are not included in your warranty support cover.

Guidelines for Tail Lift Operators

Introduction

This guide provides some basic information and highlights your legal responsibilities in the use, maintenance and examination of tail lifts.

It is written in a simple question and answer format and is intended to be used as a basic guide to clarify current legislation that applies to tail lifts and tail lift manufacturers' recommendations.

It is important that you refer to the relevant regulations and approved code of practice to familiarise yourself with your duties.

This guide has no legal status but it is considered best industry practice and, if followed, would normally be regarded as sufficient to comply with relevant health and safety law.

The Law

I have a vehicle with a tail lift, what does the law require me to do?

- You should decide and record how you are to use the tail lift safely.
- You should train the people who are to operate the tail lift in its safe use.
- You should maintain the tail lift so it is always safe to use. Following your manufacturer's maintenance instructions is considered best practice.
- You should have regular thorough examinations performed by a competent person and keep the reports for two years.
- You should keep records.

These are all legal requirements.

What records should I keep?

Enforcement authorities may ask for any of the following records:

- The manufacturer's handbook including the Declaration of Conformity.
- Maintenance work and any repairs, including the weight test certificate.
- A record of the past two years' thorough examinations.
- Records of any staff training.

You should also keep your risk assessments and any other documentation including your Safe System of Work.

What is my legal responsibility?

If you are an employer or self-employed person providing lifting equipment for use at work, or you have control of the use of lifting equipment, then the Lifting Operations and Lifting Equipment Regulations (LOLER) will apply to you.

LOLER requires lifting equipment, including tail lifts, provided for use at work, to be strong and stable enough for the particular use and marked to indicate safe working loads, as well as being installed and positioned to minimise any risk.

The work should be planned, organised and performed by properly trained people. Tail lifts should be subject to on going thorough examinations by a competent person. Records should be kept.

Extra Info

Which laws apply to me?

- Health and Safety at Work Act 1974 (HSWA)
- Management of Health and Safety at Work Regulations 1999 (MHSWR)
- Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)
- Provision and Use of Work Equipment Regulations 1998 (PUWER)

LOLER and STE Examinations

What is a LOLER thorough examination?
This is a detailed examination of the tail lift components to ensure the tail lift is safe for continued use.

Who enforces LOLER?
Health and Safety Inspectors from the HSE (Health & Safety Executive) and local authorities enforce these regulations.

What is the difference between a LOLER examination and a Statutory Thorough Examination?
There is none, just a use of different terminology. LOLER is the actual legislation, a Statutory Thorough Examination (STE) is an examination referred to within LOLER.

What happens if I don't carry out LOLER examinations?
You could be subject to enforcement action including being fined in a court of law. It is a legal requirement that you have a current report of thorough examination (STE) for the tail lift as fitted to the vehicle.

How often does my tail lift need an STE?
It is a requirement of legislation that the tail lifts are regularly examined at a frequency of no more than six months apart. Some exceptions apply, but these are extremely rare.

Who can carry out a thorough examination?
The thorough examination should be carried out by a person who is competent and impartial. This is someone who has appropriate practical and theoretical knowledge as well as experience of lifting equipment and can recognise potential defects that might be a safety risk to people if the tail lift continues to be used.

Who decides if a person is competent?
It is your responsibility to ensure that the person carrying out the STE is competent.

As the operator with no technical knowledge how am I supposed to make that decision?
Regardless of your knowledge, it is your legal responsibility to ensure that the competent person has appropriate practical and theoretical knowledge. Assistance in finding a suitable competent person can be sought via your manufacturer, a trade association or UKAS (United Kingdom Accreditation Service).

Does that mean I don't need to get my tail lift serviced?
No, you still need to have your tail lift maintained. Tail lift maintenance and LOLER thorough examinations are not the same. The easiest way to understand the difference between the two is to compare the LOLER thorough examination to a vehicle MOT inspection.

STE

How does an STE differ from a service?
The competent person assesses the rate of deterioration of the equipment, identifies any defects and certifies that the equipment is safe for continued use for the next six months. No maintenance or repair work is done during an STE.

Can I carry out a service at the same time as a STE?
The STE must be independent of the service.

Who can maintain and repair my tail lift?
Repairs should only be undertaken by suitably qualified persons using appropriate repair techniques and procedures. One way of doing this is to use a repairer approved by the manufacturer to ensure the tail lift is maintained to a reliable standard, i.e. that it's in a sound mechanical and electrical state, safe to use and has all the safety features required to ensure that accident risk is minimised.

How often does my tail lift need servicing?
Generally at least every six months, although the timescale may need to be reduced if the tail lift is heavily used or damaged. Your tail lift manufacturer should be able to advise.

Does my tail lift need weight testing?
The competent Person should decide whether a weight test is required as part of the thorough examination.

Tail lift manufacturers recommend that an annual weight test is carried out as part of their maintenance requirements.

Do I need to carry out risk assessments?
Yes – the law requires operators to carry out risk assessments on the use of their tail lifts. This should be documented and cover all aspects of the use of the tail lift fitted to the vehicle.

What if I do not service and maintain my tail lift?
It is your legal duty to maintain the tail lift in a good, safe and workable condition. You should be able to demonstrate this to the enforcement authorities if required. If you don't then you could be subject to enforcement action, including being prosecuted even if you have not had an accident.

Best Practice Summary

Assess how you will use the tail lift safely.

Train those who are using the tail lift to do so safely.

Service your tail lift to keep it safe and reliable.

Examine. Get a thorough examination report every six months.

Record all of the above and keep those records.