



USER INSTRUCTIONS

Ground Pin Kit

Code

LS GPK MK2

lyon.co.uk/user-instructions



For more detailed user information and to download a PDF copy of these instructions follow the link above or scan the QR code with your smart phone

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Quality Assurance

Quality management system assessed and certified as meeting the requirements of ISO 9001.

WARNING

Practical training in the use of ground anchor systems is essential before use. Please contact Lyon Equipment if you require training.

This information must be read and kept in conjunction with the Lyon General User Instructions supplied with this product.

Nomenclature of parts

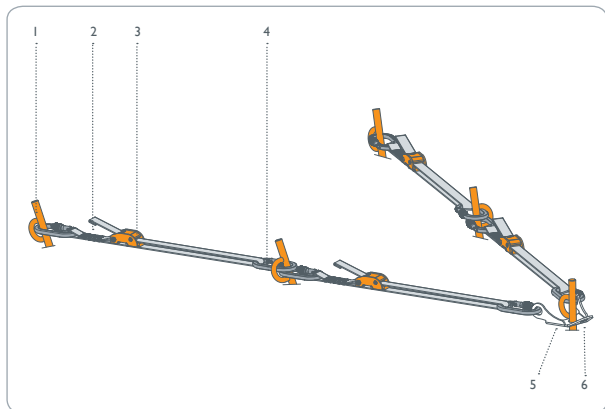
- | | |
|-----------------------------|--------------------|
| 1. Ground pin | 4. Connector |
| 2. Adjustable webbing strap | 5. Front plate |
| 3. Cam lock buckle | 6. Attachment hole |

Use

Ground anchor systems are designed to provide a temporary anchor point where no other suitable anchor points are available.

Lyon Equipment supplies four types of ground anchor: the Ground Pin Kit, the 9 Stake Ground Anchor Set, the individual Ground Anchor Stake and the individual T-Stake Ground Anchor.

The Ground Pin Kit is intended to be used where lower anchor loads are expected, for example, restraint of personnel on cliff edges or to provide a secondary means of support (back-roping) during stretcher carries on steep and/or slippery ground. If higher anchor loads are expected, multiple T-Stake Ground Anchors, multiple Ground Anchor Stakes or the 9 Stake Ground Anchor Set are recommended.



Where the term “ground anchor” is used in these user instructions, the information applies to the Ground Pin Kit. See the instructions for the T-Stake Ground Anchor, Ground Anchor Stake and the 9 Stake Ground Anchor for information on these specific products.

The ground anchor may be used in conjunction with compatible items of personal fall protection equipment of suitable specification, with due consideration to the limitations of each individual piece of equipment in the safety chain.

Ground anchors are not personal protective equipment (PPE) and there is no relevant European standard to which they can be certified.

The effective performance of this ground anchor depends on its strength, the type of ground it is placed in and the skills of the user in placing it.

Placing a ground anchor

Take suitable precautions while installing a ground anchor where there is a potential of a fall from height. Always wear eye protection and gloves when driving in ground anchors, and ensure that other personnel maintain a safe distance from the installation site to avoid injury from flying debris or tools.

The holding power of a ground anchor system depends entirely on the structure of the ground it is placed in, which can vary from one area to another and can also vary over time according to conditions.

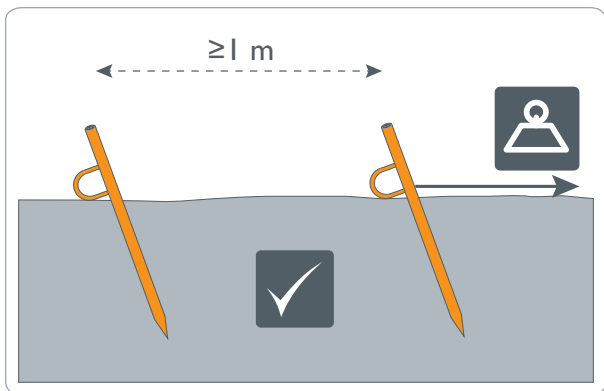
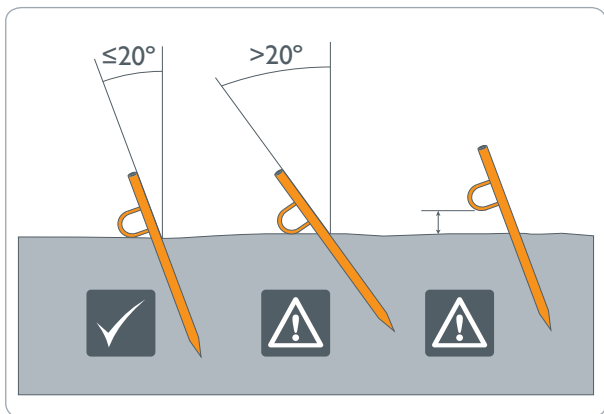
Ensure that the ground anchor system is placed at least 2 metres from any surface disturbance, e.g. a cliff edge, significant change in soil structure, void.

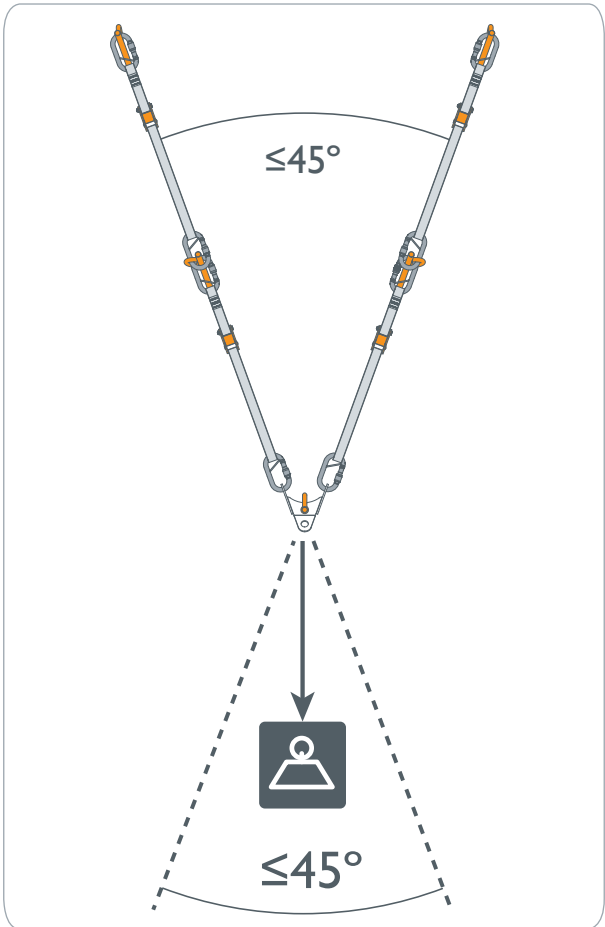
Ensure that there are no underground services, e.g. electricity, gas, water, telephone, which are buried in the immediate area where the ground anchor pins are to be inserted – danger of death.

Each pin must be driven into solid ground until the bottom of the eye meets the ground surface. If this is not achievable, do not use the ground anchor, remove it and reposition it to a location where the correct depth can be achieved. If the pin impacts against an immovable object, do not continue trying to drive it in – this can damage the pin. Remove it and reposition it instead.

Do not use ground anchor systems solely in loose material such as snow, dry sand, or icy soil.

See diagrams overleaf for correct installation and permitted angles of loading of ground anchor systems.





Never connect unprotected load bearing textile items directly to the attachment point - use an EN 362 or EN 12275 type Q connector. Ensure the connector is correctly loaded in accordance with the connector user instructions.

Always connect the Ground Pins together using the cam lock straps as shown in the images. Always use all five pins. Tighten the cam lock straps by hand, ensuring that the straps have sufficient tension to prevent movement of the pins. Do not over-tension as this may reduce the holding power of the Ground Pin Kit. Each cam lock strap should be equally tensioned to maximise load-bearing ability. Make sure that all connectors are correctly orientated and fully closed.

NEVER use a single ground anchor pin as the sole anchor point of any work system.

NEVER connect the main and safety ropes of a work positioning system to a single ground anchor system. An independent ground anchor system must be used for each rope.

Do not allow moving ropes to come into contact with ground anchors.

Do not allow the ground anchor to interfere with the operation of any device attached to the ground anchor.

Ensure the load applied to the ground anchor is as close to, and parallel with, the ground as possible.

During use it is essential to regularly check that the ground anchor is holding the loads applied and is still correctly positioned.

Inspection

Ground anchors should be subject to:

- Pre-use checks
- Thorough inspections – every 6 months recommended
- Interim inspections (as appropriate)

Check all metal items for any signs of wear, corrosion, deformity or defect.

Check the pins for significant deformity, sharp edges and/or cracks, especially around the head of the pins where “mushrooming” of the metal may occur with heavy use. Sharp edges and burrs should be removed with a file.

Connectors should be inspected in accordance with the connector user instructions.

Webbing should be checked for cuts, abrasion, burn marks, and signs of fading which may indicate UV damage. Check stitching for broken, cut or worn threads. Check that the cam lock buckles function correctly and that the nuts and bolts are securely fastened. Straps showing any signs of damage must be replaced. Please contact Lyon Equipment for details.

The checks should be undertaken in good light. Any item showing any defect should be withdrawn from service immediately.

It is recommended that the ground anchor is marked with the date of the next or last inspection.

Chemicals

Avoid all contact with chemical reagents that could affect the performance of the ground anchor, e.g. acids, caustic substances and oxidising agents. If the ground anchor comes into contact with any chemicals, remove it from service and contact Lyon Equipment for advice.

Any cam lock straps which have been in contact with chemical reagents must be withdrawn from use and replaced.

Materials

The pins are galvanised steel
The front plate is stainless steel
The webbing is polyamide
The thread is polyamide
The cam lock buckles are steel / aluminium alloy
The connectors are steel
The bag fabric is PVC coated polyamide.

Obsolescence

Metal items have a potentially indefinite lifespan if stored correctly.

Cam lock straps have a maximum lifetime of 10 years.

Marking

Marking, if required, can be made by attaching a tag to the ground anchor. Ensure that any tags do not interfere with the function or performance of the ground anchor.

End of document.



General user instructions

Lyon Equipment Limited
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For more detailed user
information and to
download a PDF copy of
these instructions and a
Declaration of Conformity
follow the link above or
scan the QR code with
your smart phone



Notified body controlling manufacture (where applicable)

Where items of Personal Protective Equipment require an EU type examination in accordance with Personal Protective Equipment (EU) Regulation 2016/425, the body controlling the manufacture is: Notified body No. 0598 SGS Fimko Oy, P.O. Box 30 (Särkiniementie 3), 00211 HELSINKI, Finland.

WARNING

Make sure that you have read and understood these instructions before using this equipment. These user instructions are to be read and kept along with any other user information provided.

Activities at height are hazardous and may lead to injury or death. It is the user's responsibility, at all times, to ensure that they understand the correct use of any equipment supplied by or through Lyon Equipment, use it only for the purposes for which it is designed, and practice proper safety procedures including having a rescue plan in case of emergency.

This product must not be used outside its limitations, or for any purpose other than those described in the user instructions. Misuses forbidden in these instructions are examples only; many other misuses may exist which could lead to injury or death.

Do not use combinations of items of equipment in which the safe function of any one item is affected or interferes with the safe function of another.

Please note, the information in these user instructions is not exhaustive, and is not a substitute for comprehensive instruction and training by a competent person.

Lyon Equipment is not responsible for any consequences, whether direct, indirect or accidental, resulting from the use of its products. If you are unsure about the correct use of this product, please contact us.

Who can use this equipment

This equipment should only be used by trained, competent and responsible persons, or the user should be under the direct supervision of a trained, competent and responsible person.

Activities at height should not be undertaken by persons affected by alcohol or drug dependence, diabetes, epilepsy, fits, blackouts, fear of heights, vertigo / dizziness / difficulty with balance, heart disease / chest pain, high or low blood pressure, impaired limb function, obesity, psychiatric illness, musculoskeletal issues, e.g. a bad back.

General instructions for use

Equipment must be checked before each use, to ensure it is serviceable and operates correctly. Checks should also be carried out during use. In addition, a thorough inspection by a competent inspector should be carried out in strict accordance with these user instructions, and a record kept of these inspections.

This product may be used with any compatible item of equipment, keeping in mind the limitations of each item in the safety chain. It should be noted that a full body harness is the only type of harness which may be used in a fall arrest system.

The anchor device or anchor point is of primary importance and should be unquestionably reliable. It should be strong enough to withstand the foreseeable maximum load that could be applied e.g. in the event of a fall.

When selecting an anchor, the anticipated directions of loading and potential loads should be taken into account.

Anchors should be selected and positioned to allow work to be carried out in such a way as to minimise the potential for a fall and potential fall distance, for example by keeping the anchor point / device above the user.

Anchors should not have sharp or rough edges which could damage equipment (use edge protection if necessary).

On each occasion of use, verify the free space required beneath the user in order to avoid an impact. Always try to place protection so that any fall will be stopped before the user hits the ground or any other obstruction. Remember to allow for rope stretch and slippage in the belay device or rope ascender / descender. In a fall arrest situation, the user must be protected from dynamic forces of greater than 6 kN in the event of a fall, e.g. by use of a fall arrest system incorporating an EN 355 energy absorber.

Maintaining your equipment

Wash in clean water not exceeding 30°C with pure soap and rinse in clean cold water. Do not use chemical products, solvents or detergents – these should be regarded as harmful.

Due to the difficulties in effectively disinfecting equipment, we recommend that any contaminated equipment should be withdrawn from use and disposed of in a suitable manner.

Equipment must be clean and dry before storing. Always allow to dry naturally, away from direct heat. Equipment should be stored in a cool, dry, well-ventilated area, away from excessive heat, high humidity, sharp edges, corrosives, sunlight or other sources of ultraviolet light (UV) and other possible causes of damage.

During transport, this product should be protected from abrasion, mechanical damage, chemical contamination, UV and heat.

Textiles

Always keep textile items at temperatures between -30°C and +50°C.

Metal items

Always keep metal items at temperatures between -20°C and +60°C.

No alterations, additions or repairs may be made to this product without the manufacturer's prior written consent; if done, the repair must be carried out by a competent person for repair authorised by Lyon Equipment to make the repair; and in accordance with specified procedures.

These instructions must be strictly adhered to.

Inspection

A thorough inspection should be carried out at least every 6 months by a competent inspector in accordance with these user instructions. A record of these checks should be kept with the product along with these user instructions. In addition, interim inspections should be carried out where products are used intensively, or in particularly harsh environments where damage is more likely to occur, or where legislation or the type of equipment make it necessary.

Pre-use and thorough inspections are essential because the user's level of protection depends on the continuing correct performance of this product.

PPE (Personal Protective Equipment) inspection training is available from Lyon Equipment.

Lifetime, and when to withdraw your equipment from use

Withdraw your equipment from use if any one of the following applies:

- It shows sign of wear and tear / damage that may affect performance
- Markings on the product are no longer legible
- You suspect it may have been exposed to chemical contamination or extreme temperatures
- It fails a periodic examination
- It has been used to arrest a fall or has been excessively loaded
- It is more than 10 years after the date of manufacture (textile items or items with textile components). Metal items have a potentially indefinite lifespan if stored correctly.
- If you have any reason to doubt that it is safe to use.

It is the responsibility of the competent inspector to decide whether the equipment should be put back into use, or permanently withdrawn from use. Equipment permanently withdrawn from use must be destroyed, and should be recycled where facilities exist.

Certain environmental elements will considerably accelerate wear: salt, sand, dust, snow, ice, moisture, chemicals, sunlight (UV radiation) – list not exhaustive.

Warning: the safe working life of this product may be as short as its first use in extreme circumstances.

If in doubt, do not hesitate to scrap this product.

Guarantee

In the event of any defect in materials or workmanship please return the product to the dealer, distributor or manufacturer within 3 years of purchase for inspection. We will replace or repair as required. This guarantee does not cover normal wear and tear or accidental damage.

Note to resellers

If the product is re-sold outside the UK and Eire, but within the EU, the reseller is responsible for providing instructions for use, maintenance, periodic examination and for repair in the language of the country in which the product is to be used.

If you require the Intrastat commodity code / customs tariff code or NATO stock number (where applicable) for this product, please contact us via lyon.co.uk

Inspection records







A record must be kept for each component, subsystem and system, including name and contact details of the manufacturer or supplier, product description, serial number, year of manufacture, date of purchase, date of first use, any other relevant information, and history of periodic examinations and repairs, the name and signature of

the competent inspector and the next due date for inspection. An example of a suitable equipment record is shown on this user instruction and can also be downloaded at lyon.co.uk

Local jurisdiction may dictate that extra information be recorded in the inspection record – check your country's legal requirements. Some products may have features which need special monitoring during periodic inspections, e.g. wear indicators, in which case this information should also be recorded on the inspection record.

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Explanation of symbols

	Refer to user instructions
	Permitted use
	Caution
	Danger of death
	Telephone number
	Anchor point
	Rope diameter
	Cable
	SWL (Safe Working Load)

