ActSafe PME Ascender 4-stroke engine

ActSafe®

PME Ascender 4-stroke engine User's Manual revision 1-2011

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INTRODUCTION

Foreword

Thank you for choosing a product from ActSafe Systems AB®.

When used correctly this ascender will revolutionize the way you work at height This hoisting equipment makes it much less stressful for you to reach your workplace in combination with lifting materials and tools.

About ActSafe

ActSafe offers you a full range of personal protective equipment (PPE), and comprehensive training in the use and handling of this equipment. Visit our website for more information on ActSafe Power Ascenders *www.actsafe.se*

About this manual

The information in this manual cannot replace training and exercise. The ascender must only be used by personnel who have undergone proper training. Improper use may result in serious injury or death.

Description of the manual

Safety messages of extra importance are presented with the words danger and caution. The meanings of the signal words are:

CAUTION

Not following these instructions may result in INJURY or damage to the equipment.

DANGER

Not following these instructions may result in SERIOUS INJURY or DEATH.

RECOMMENDATION

User recommendation is described like this.

Further information about consequences and other details is presented like this.

NOTE!

The word "Note" will precede important information about the equipment used together with the ascender.

Definitions

WORD	DESCRIPTION
Anchor	Attachment point for rope or ascender.
Ascending	Moving up on the rope.
Descending	Moving down on the rope.
Primary rope	Main rope used with ascender. Approved according to EN 1891.
Backup rope /Secondary rope	Safety rope that takes load if failure with primary rope. Approved according to EN 1891.
Fall arrest	Device that stops a fall and limits the load. Approved according to EN 353-2.
Active / Live rope	Rope that is loaded during work.
Passive / Dead rope	Unloaded rope during work.
User / Operator	Operator of the ascender.
Competent person	Personnel with adequate training and certification for the assignment.
Factor 1 fall	A fall of distance X m with X m of rope catching the fall. Fall factor is fallendistance divided by length of rope catching it.
Petzl I'D / Petzl Rig	Industrial Descender, device for descending a rope.

DISCLAIMER

Since ActSafe Systems AB is unable to control the use of the equipment, the user and the user only is responsible for any damage, personal injuries or death resulting from improper use and maintenance of this product.

ActSafe Systems AB, including our distributors or working partners do not accept any responsibility or liability for paymen due to damage, personal injuries or death-resulting from use of uncertified personnel or the improper use and maintenance of this product.

The ascender is not safety equipment. It is a tool for hoisting and lowering a person and/or equipment. It must therefore always be used in combination with an approved secondary system including approved components for fall arrest.

The product must not be used by personnel that have not been certified by ActSafe Systems AB or our distributors.

This manual covers the basic features and use of the ascender only and does not replace adequate training and certification for working in rope access systems.

SAFETY

Users of this product must have been certified or have undergone proper approved training either by ActSafe Systems AB or by ActSafe approved distributors.

DANGER

Read this chapter carefully and make sure you understand its contents.

Ascender safety

The ascender must not be used:

- For anything other than that for which it has been designed.
- In an explosive environment.
- If modified in any way by anyone other than ActSafe Systems AB.
- After a free fall from a height more than 1 meter against any hard surface.
- If subjected to a dynamic load as it is designed to work in static systems only.
- If subjected to mis-use in any way those parts or components may have been damaged.

Use only original spare parts / material recommended by ActSafe Systems AB.

If unclear of the condition of the ascender, it must be inspected and approved by ActSafe Systems AB or an ActSafe approved distributor before use.

The ActSafe Ascender and its equipment must be checked before and after every use and must be subject to at least one inspection per year (national regulations may require more frequent inspections).

Engine safety

For full information about the engine, check the engine owner's manual supplied.

Certain parts of the engine can remain hot long after it has been turned off. It is therefore important to take care when handling the ascender to prevent injury by burning.

CAUTION

Make sure that the hot parts do not come into contact with clothes or anything that would be damaged by excessive heat.

DO NOT start the engine:

- If the air filter or its cover have been removed.

DO NOT run the engine:

- In an unventilated area. (Exhaust gases contain carbon monoxide, an odourless deadly toxin).
- Without silencer. Check the silencer on a regular basis and replace if necessary.
- If there is an accumulation of grass, leaves or other flammable material under, on or behind the silencer.

Further do **NOT:**

- Open the fuel tank or fill the fuel tank when the engine is still hot or running. (The engine should cool for at least 2 minutes before refuelling).
- Transport the engine if there is fuel in the tank.
- Use a removed spark plug to determine whether it is sparking.
- Touch the silencer, cylinder or radiator when they are hot – danger of burns.

Fuel safety

Use a container approved for fuel.

DO NOT:

- Run the engine if petrol has been spilled or it smells of petrol or if there is any other danger of explosion.
- Refuel the ascender in non-ventilated areas such as inside a building.
- Store, spill or handle petrol near any ignition source, such as unshielded flames, sparks or very hot parts.
- Open the fuel cap with the engine running.

General safety measures

- Draw up a risk analysis and a minimum of 2 separate rescue plans.
- Make suitable rescue equipment available.
- Check all components in the system.

TIPS

The area of risk under someone working at height is within a radius of 2/3 of the height and larger due to strong wind. Other persons must keep away from the area of risk.

Always secure tools and equipment.

Rig for rescue

Traditional rescue methods refer to climbing/ascending the unloaded rope to the injured operator and lowering/descending to safety with the help of equipment.

This will normally take longer than just descending directly without needing to access the injured person.

As time is important in accessing an injured person ActSafe recommend always to plan for rescue when planning your work with an ascender.

TIPS

Plan for rescue when rigging the rope system.

Rope system safety

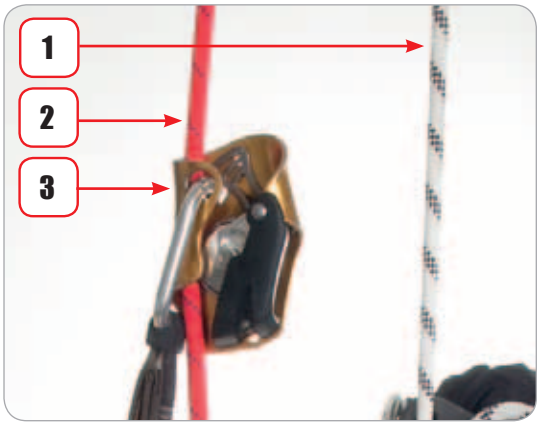
The rope system must consist of a primary-rope (1) and a secondary back-up rope (2), both must be approved according to EN1891 and have a diameter of 10-13mm.

The two ropes must have separate anchor points that must hold at least 15 kN each. A competent person shall judge if the separate anchor points are sufficient.

National regulations may require more. The product ascends on the primary rope. If any part of the load carrying system should break then the load is immediately transferred to the secondary rope which, together with the fall arrester (3) according to EN 353-2, provides a fall arrest system.

Rope characteristics are an important issue when using the ascender. Ropes with characteristics not suitable for the ascender might, in the worst-case scenario, result in a jam between the rope grab and the knife,

with a damaged rope as a consequence.



DANGER

Do not use the Ascender without a backup system.

The lifting capacity of the ascender is higher than the Safe Working Load (SWL) of the most common fall arrest devices. Therefore, when lifting a load it may be necessary with separate fall arrest system(s) for the load. See the user's manual of the fall arrest device to find out the SWL.

The dead rope must be unloaded. Do not build cableways using the primary rope as shown in the picture.

Rope recommendations

ActSafe PME is designed for EN 1891 ropes. However, all EN 1891 ropes does not perform well with the ascender. ActSafe has tested a variety of ropes; please contact usfor more information about different rope qualities.

Please read and understand the tips and directions regarding ropes below and you will get more out of your ropes as well as your ActSafe Ascender.

As a rule of the thumb one can say that extremely soft ropes don't get good grip in the rope grab. A very soft rope may result in poor lifting capacity since the rope starts to slip or in the worst-case scenario even a jam.

NOTE! *Not all EN 1891 ropes perform in a similar way. They have slightly different characteristics (stiff, soft, thick/thin mantle etc).*

FARE

A rope that has been in contact with acid must not be used under any circumstances. Scrap the rope!

TIPS

The user should carry out tests with the rope normally used prior to operations involving the ascender. Consult ActSafe for more information and assistance in the test of the rope.

Keep your ropes in good condition, check with your distributor / manufacturer on how to do this.

A new rope will get an increased service life if it is put to soak in cold water before the first use.

Avoid getting sand or dirt onto/into the ropes since it will wear the rope grab and loop. Use a rope mat, rope bag or similar.

If the rope has been soiled by dirt, sand, gravel, oil or grease, consult your manufacturer on the proper action.

Personal safety

The user must wear a combination harness (1,2) approved according to EN813 (low attachment point for the primary rope, 3) as well as EN361 (high attachment point for the secondary rope or fall arrester, 4). National regulations may require more.

Do not use the ascender if you are tired, ill or under the influence of alcohol, drugs or medication.

Before use make sure that you

- Check all components in the system
- Use appropriate PPE (Personal Protective Equipment, for example helmet, gloves and protective eye wear, hearing protection 5)
- Use appropriate clothes without loose hanging parts.
- If necessary bind long hair and beards to keep the shoulder region clear.

When using make sure that you

- Pay attention and use common sense
- Do not hold the rope just above the winch; there is a risk of being pinched.
- Keep your hands and feet off rotating parts
- Avoid pendulum movement when starting to ascend.

Training

Users of this product must have been certified or have undergone proper approved training either by ActSafe Systems AB or by ActSafe approved distributors.

The ActSafe PME ascender makes it possible to access heights and depths in a very quick, safe and reliable way.

The ascenders are very easy to implement within various work methods and is invaluable in places where access is difficult or impossible by other means. Because of the variety of use in different areas and circumstances training is essential.

Working at height or in locations presenting difficult or confined access requires great skill and such standards can only be achieved as a result of extensive training and regular refresher courses.

The below three different levels applies. Please consult your local ActSafe distributor for further information.

ASA Level 1
Basic PME Operator
(1-day course)

In this basic course we learn the user how to effectively use the ascender for basic operations in a safe and effective manner. He/she is competent:

- to perform a pre-use checking
- in ascending on vertical rigged ropes
- in using the ascender as a winch
- in use of the ascender in a basic lowering system
- in rigging basic rigging
- in self-rescue
- able to identify and solve simple technical problems

A level one also has basic knowledge of international legislation in the field of rope access operations.

ASA Level 2
Advanced PME Operator
(1 day course)

In the advanced course we learn the user how to effectively use the ascender in more complex rope access and rescue operations. Prerequisite for this course is a Level ASA 1 certificate. He/she is competent:

- in all points of the level 1 syllabus
- in more complicated rigging
- in performing team rescue operations

ASA Level 3
Master Operator
(5-day comprehensive course)

In this comprehensive course we learn the user how to effectively use the ascender in basic-, complexand very specific rope access and/or rescue operations. We teach the end user how to implement use of ascenders in their specific working environment. Techniques, legislation and procedures in one package. There is no prerequisite for this course as Level 1 and 2 are integrated. He/she is competent:

- in all points of the level 2 syllabus (more indepth)
- conversant with relevant worktechniques and legislation
- implementing use of ascenders in existing working procedures
- use of the ascender in specific working environment (end user specific)

SYSTEM DESCRIPTION

NO	PART
1	Primary connection
2	Sling
3	Attachment karabiner
4	Chassis
5	Rope grab system
6	Rescue kit
7	Descending Device
8	Spark Plug (hidden)
9	Air Filter (hidden)
10	Fuel cap

NO	PART
11	Fuel tank
12	Accelerator handle
13	Main switch
14	Secondary connection point
15	Lower hole, NOT FOR LIFTING
16	Transmission
17	Oil tank cap/ level meter
18	Starter
19	Priming bulb
20	Choke

NO	PART
1	Secondary connection
2	Lower hole, NOT FOR LIFTING
3	Loop (Rope guide)
4	Knife
5	Rope Cover
6	Rope Grab

General

This product has been designed for lifting a person or load in a static rope system (including backup rope) with ropes of 10-13 mm approved by EN1891. The dead rope shall be unloaded.

The karabiner in the primary connection can be replaced by any other karabiner approved by EN362. The sling in the chassis cannot be replaced by anything other than an original spare part from ActSafe Systems AB.

Engine & fuel

The ascender is equipped with a 4-stroke engine. Normal 4-stroke unleaded petrol 91-octane or higher may be used. However, we recommend the use of a 4-stroke alcylate-petrol 95 octane.

- It gives the engine higher performance.
- It gives a cleaner engine.
- Alcylate 4-stroke petrol can be stored for long periods without impairing the quality.
- It does not contain the toxins lead, benzene, aromatics or sulphur.

Over load protection

The ascender is equipped with overload protection that is based on a centrifugal friction function.

When the engine speed increases, two brake shoes are forced towards a drum; the friction causes the rope grab to be driven. If the ascender is run according to the instructions, the overload protection will withstand 300 kg.

The maximum load can also be limited if the engine's power diminishes, e.g. if lower quality fuel is used, if the air filter is dirty, if the weather conditions are bad, if used at higher altitude etc.

When the Ascender is new, a somewhat lower lift capacity may be experienced due to the fact that the brake shoes have not yet been run in.

If the ascender still has a low lift capacity, despite a running in period, this can be due to worn brake shoes. Contact your ActSafe local distributor.

The transmission is equipped with a safety shear bolt protecting it from damage. It is located under the rescue kit bag.

Descending equipment (emergency)

If needing to descend (for example when running out of fuel), there is a rescue kit on the ActSafe Ascender that enables the worker to simply connect a descending device, disengage the ascender, and then descend to the ground.

The rescue kit consists of

- 1 sling
- 1 step loop
- 2 karabiners (colour coded blue and red).
- 1 rope clamp
- 1 descender device including red karabiner

How to perform self rescue is further explained on page 20 and is also a part of the basic Ascender training.

USAGE

Checklist before and after use

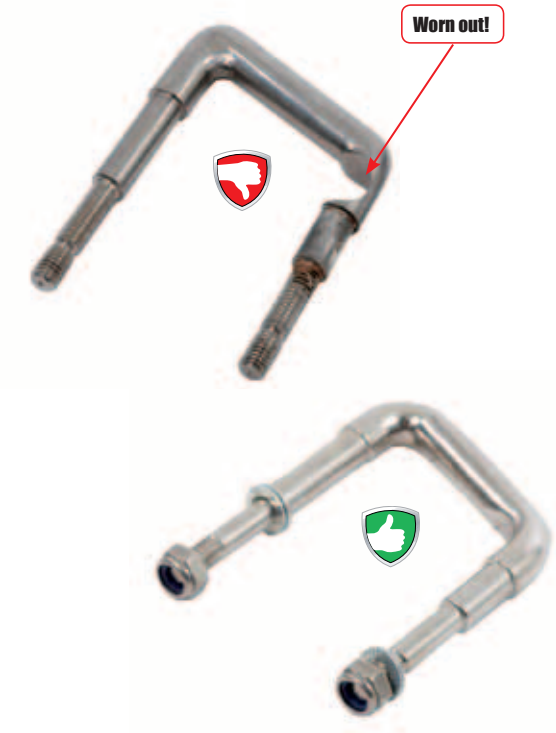
The user must make sure that the ascender is in full working order and the correct preparations have been made before each use of the ascender. If in doubt do not use the ascender and consult ActSafe Systems AB or an approved distributor.

Check the ascender and its components for loose parts, excessive wear and damages. Damage includes cracks, marks and/or abnormal wear indicating the product has been subject to excessive force or impact energy.

FARE

A broken loop will result in the rope to leave the rope grab with a free fall as the result.

Warning! The picture shows a loop that is worn to a dimension far from what is acceptable/safe.



Inspect the rope grab system in particular;

- The rope grab, for example the ridges, should be intact.
- The rope cover.
- The loop (rope guide).
- The knife.

Further inspect

- The primary connection; the sling and the karabiner.
- The chassis, especially the area for the primary connection.
- That the ascender functions and controls are fully functional.
- No fuel or oil leaks are detectable.
- Regular inspection performed (according to national regulations).
- All other parts.
- The fuel level is sufficient for the assignment.

If in doubt about the condition of the ascender consult either ActSafe Systems AB or an approved distributor.

Pay attention to the following points when assessing the work situation

- Rescue plan and rescue equipment available.
- Risk analysis performed.
- Backup rope system installed and the fall protection device (EN 353-2) attached to the front or rear connection point (EN 361) of the full body harness.

Connect to rope

1. Place the ascender on the ground.
2. Open the rope cover.

3. Form a loop on the rope and push it through the rope guide just above the rope grab.

4. Put the rope around the rope grab.
5. Close the rope cover.

6. Connect the primary connection karabiner to the EN 813 connection point of the full body harness and check the karabiner is locked.

RECOMMENDATION

Drive the ascender to waist level to simplify connection to harness.

Be careful handling the ascender with the engine running - there is a risk of accidental lifting without being properly attached.

If the ascender is connected to the rope and not the operator; pay attention starting the engine as it can accidentally ascend a short distance on the rope before the engine is warm.

DANGER

Make sure that the rope is attached correctly before use.

Check that the live rope exits to the left and that the rope cover is fully closed.

Attaching the rope incorrectly can result in serious injury or death. Always use the ascender with a backup rope system.

Ascent

1. Place the ascender on the ground.
2. Turn the main switch on.
3. Press the priming bulb several times until fuel can be seen (hidden).
4. Use the choke if needed (cold engine).
5. Pull the starter (hidden).
6. Turn the accelerator handle towards you to increase the speed.
7. Hold the handle firmly in the right hand with the ascender pointing towards the right.

So that the exhaust fumes will blow away from the user.

8. Feed away the "dead rope" during thefirst few meters of ascent.

After approx 5 meters the weight of the rope will be sufficient to "clean" the ascender from itself.

9. Stop the motion by turning the handle away from you or let it go, then slide the ignition switch to the STOP position.

Always make sure that the rope feeds smoothly. During ascent make sure the outgoing rope is not blocked in any way.

CAUTION

Do not hold the rope just above the winch, there is a risk of being pinched.

RECOMMENDATION

Stand straight beneath the anchor point in order to avoid a pendulum movement when starting off the ground.

Turn the choke off as soon as the engine starts to ignite.

Adjust the speed according to the circumstances, be aware and use common sense.

If balance is needed, hold on to the primary connection sling or karabiner.

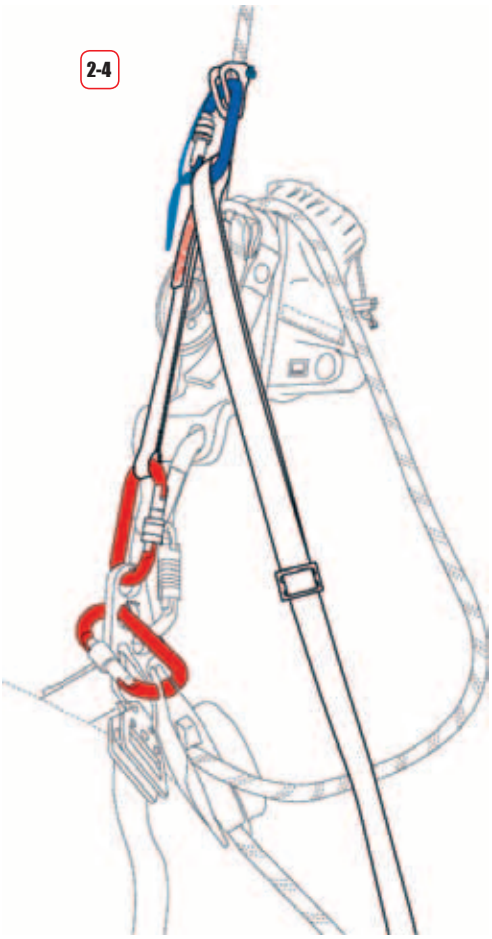
Slowly pull the starter until you feel resistance. Then pull the starter strongly in order to avoid backstroke and injuries to hand or arm.

Emergency descent

Stay connected to your backup rope system during all these steps. In the pictures the backup system is excluded for clarity.

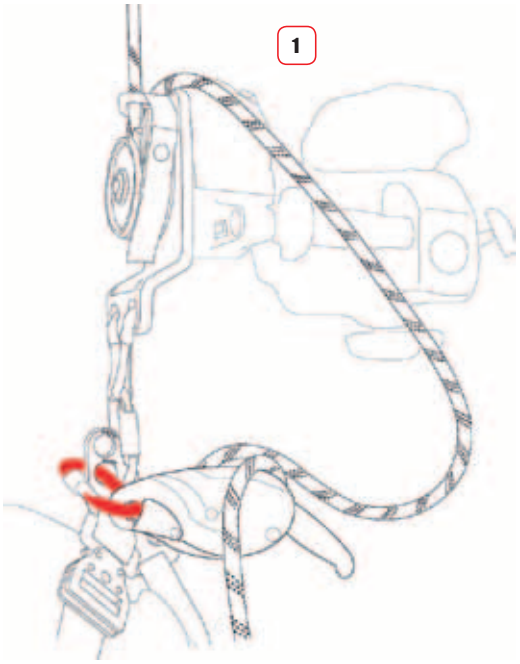
Use the equipment in the rescue kit.

1. Attach the Descender to the rope under the ascender and connect it to the harness with the attached red karabiner. Ensure that the Descender have been threaded correctly.



RECOMMENDATION

Have sufficient rope slack (approx 0.5 m) between the Ascender and the Descender so you can work easily.

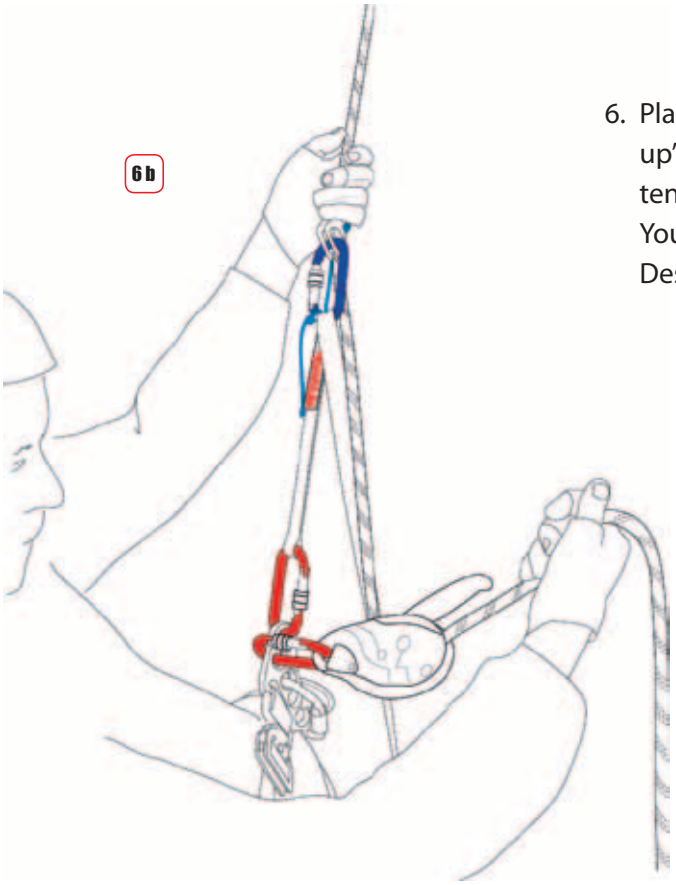


2. Attach the rope clamp (blue karabiner) to the live rope above the ascender (approx. 10 cm).
3. Connect the rope clamp to the harness with the red karabiner on the shorter sling.
4. Tighten the short sling by pushing the rope clamp up.

The connection to the live rope is now formed by the rope clamp that is attached to the harness by the short sling.

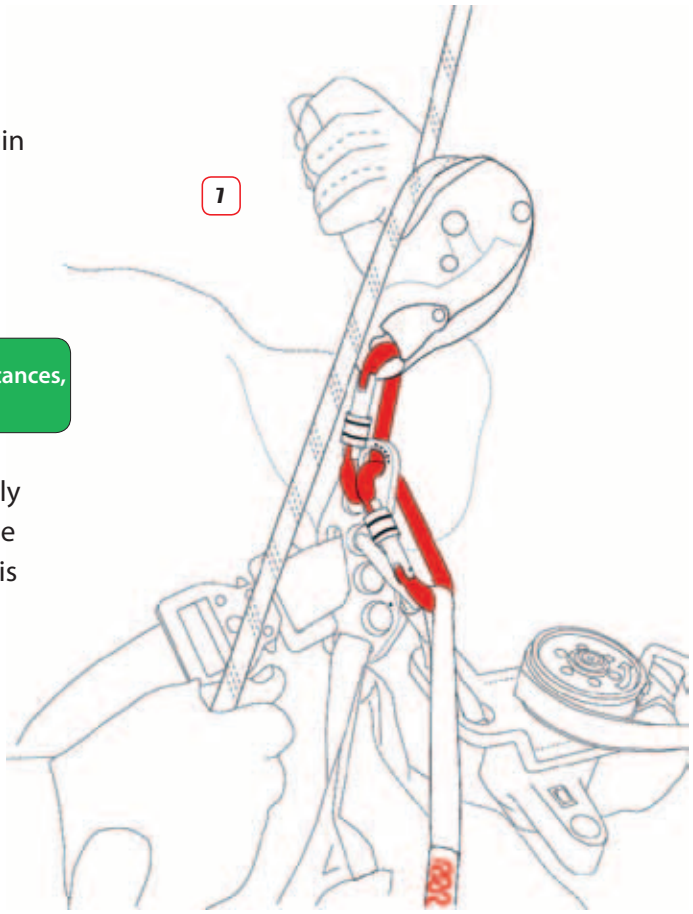
5. Release the rope from the rope grab.

The Ascender is now loose and you are connected to the rope clamp, the Descender and your backup system.



6. Place a foot in the step loop and "step up" (a). While you are standing up tighten the rope through the Descender (b). Your weight is now transferred to the Descender when you sit down.

7. Disengage the rope clamp and begin the descent.



RECOMMENDATION

Adjust the speed according to the circumstances, be aware and use common sense.

This technique is also employed in daily work when needing to descend, i.e. the ascender will transport you up, and this method will allow descent.

Refuelling

Follow these instructions when refuelling to minimise risk of fire and personal injury.

1. Turn the engine switch off.
2. Allow the engine to cool.
3. Open the fuel tank.
4. Refill the fuel.
5. Close the fuel tank.

Move at least 3 m away from the refuelling site before starting the engine.

Transportation

Carry the Ascender by the accelerator handle with the engine off and the silencer away from your body.

For longer transports make sure:

- The engine switch is off.
- The engine is cool.
- The fuel tank is empty.

RECOMMENDATION

Use the transportation box to extend the service life of the ascender.

Storage

Store the ascender in the transportation box, in a cool, dark and dry place.

Keep the ascender away from areas where fuel vapours can reach sparks or open flames (from water heaters, electric motors or switches, furnaces etc.)

RECOMMENDATION

Always clean and dry the ascender before putting it away for storage.

Empty the fuel tank after each use.

SERVICE & MAINTENANCE

Use only original spare parts / material recommended by ActSafe Systems AB.

Maintenance recommendation

Clean the unit regularly (the performance will be affected negatively by excessive dust, clogged parts etc). Check the karabiners for oxidation. Clean and lubricate if needed.

Check the engine oil, replace if needed Check the air filter, clean or replace if needed.

RECOMMENDATION

Go through "Checklist before and after usage" at every maintenance to increase the safety for the user (/users) of the product.

Keep the engine cylinder fins and control parts free from dirt and other foreign substances, which could affect the revolution speed.

Clean the ascender of salt water/dirt

NOTE ! Do not use running water or any degreasing agent, never use a high-pressure washer!

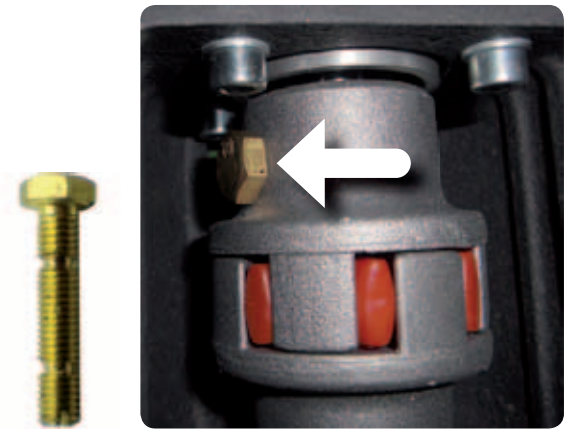
- Clean and dry the ascender with a wet cloth or brush after use, removing all moisture and dirt.
- Dry dust can be removed with compressed air.
- Clean the karabiner thoroughly, lubricate with thin oil.

RECOMMENDATION

Remove the ignition cable before service. Do this to avoid accidental start-up during maintenance work.

Changing a broken safety shear bolt

1. Take off the rescue kit bag (velcro connection).
2. Rotate the rope grab if needed so the shear pin comes visible.
3. Unscrew the shear pin using a screwdriver and a shift key.
4. Attach the new safety shear bolt with a 13 mm wrench. Use Loctite 243. Do not over-tighten!



DANGER

If a safety shear bolt is broken, regardless of the reason, it must be sent to an authorized dealer for safety inspection! The ascender must not be used before this inspection is done.

This service must only be performed by ActSafe or an authorized ActSafe distributor.

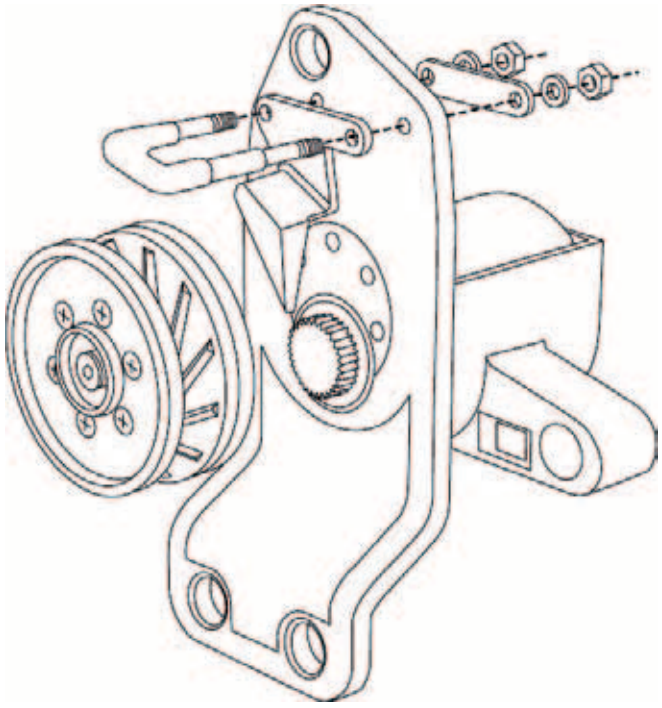
Changing the rope grab system

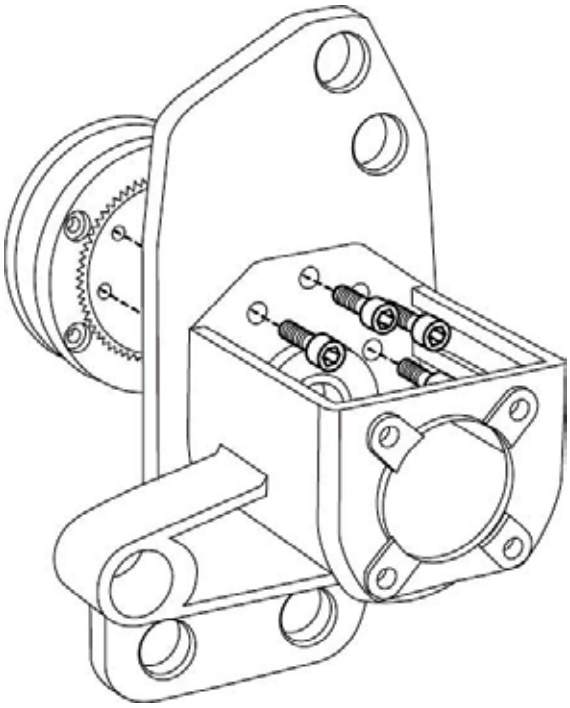
If unsure of any of these steps, contact ActSafe Systems AB or local distributor.

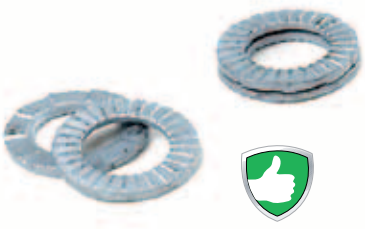
1. Unscrew the loop inside the textile bag (2 nuts).
2. Remove the loop, knife and the rope cover which is mounted on the loop.
3. Unscrew the rope grab and take it off (5 screws).
4. If necessary change the textile dust protector (not shown) behind the rope grab.

After cleaning, lubricate the gear ring and gear wheel with water-proof grease.

5. Replace the rope grab and tighten the screws to 10 Nm and use Loctite 243.
6. Replace the knife and the loop and fasten the two M6 nuts with Nordlock washers at 10 Nm. Make sure the Nordlock washers are assembled correctly.







DANGER

This service must only be performed by ActSafe or an authorized ActSafe distributor.

Changing the primary connection sling

If unsure of any of these steps, contact ActSafe Systems AB or local distributor.

1. Use pliers to force the captive bar out.
2. Remove the karabiner and the sling.
3. Push the new sling through the chassis holes.
4. Connect the new karabiner and lock it with a captive bar.

Engine maintenance

For full information about the engine maintenance points and schedule, check the included owner's engine manual.

Remember to change the oil after the first 10 hours of usage. (Normal service period 50 hours/6 months.)

Carburettor settings

The carburettor should be adjusted to keep the rope grab from turning during engine idle.

Air filter

The air filter should be cleaned daily or more often if working in exceptionally dirty areas in order to avoid problems such as:

- Carburettor malfunctions.
- Starting problems.
- Engine power reduction.
- Unnecessary wear on the engine parts.
- Abnormal fuel consumption.

Spark plug

The spark plug can have deposits on the electrodes, which may result in malfunction and/or starting difficulties. The spark plug condition is influenced by:

- A dirty air filter.
- Hard running conditions.

In some areas, local legislation requires using a resistor spark plug to suppress ignition signals. If the engine was originally equipped with a resistor spark plug, you have to choose the same type of spark plug whenever you replace it.

Oil level check and change

Check the engine oil level with the engine stopped and in a level position. Change the oil regularly to prolong the lifetime of the engine.

RECOMMENDATION

Drain the used oil when the engine is warm. Warm oil drains quickly and completely.

Equipment list

Hex key 4 mm – straight end

Wrench 10 mm

Wrench 13 mm

Screwdriver

Pliers and hammer

Material

Thin Oil

CRC 5-56

Loctite 243

Grease Interflon LS 2

Spare parts

The most common parts are listed here; contact ActSafe Systems AB or your local distributor if you don't find your part here.

Rope grab	50-150-101
Cover	50-150-103
Knife	50-150-105
Safety Shear bolt	50-150-115
Loop	50-150-106
Sling	50-150-112
Karabiner	50-105-052

TROUBLE SHOOTING GUIDE

If this guide does not solve your problems, first check the engine manual for further trouble shooting guide and then contact ActSafe Systems AB or by ActSafe approved distributor.

The engine does not start

PROBABLE CAUSE	REMEDY
Empty tank	Refuel the ascender.
Ignition cable loose	Reattach the ignition cable to the spark plug.
Wrong fuel	Empty the tank, clean and refuel the ascender.
Wrong carburettor settnings	Set the carburettor, see service instructions.

The lifting capacity is notably weak

PROBABLE CAUSE	REMEDY
The fuel is wrong	Change to recommended fuel.
The winch is being used at high altitude.	High altitude will result in loss of performance. The engine can be equipped for use at high altitude. Contact ActSafe or an approved distributor.
The engine is in bad condition	Service the engine.

The grab on the rope is poor, the rope slips

PROBABLE CAUSE	REMEDY
Rope connected incorrectly	Reconnect the rope.
The rope is not suitable for the ascender	Change the rope.
The rope grab is worn	The ascender is in need of repair and service, contact ActSafe or an approved distributor.

WARRANTY & GUARANTEE

ActSafe is responsible for the proper function of the product during the warranty period. If a defect is detected while under warranty, the product will be repaired by ActSafe or an authorized Service Dealer.

The validity of the warranty must be proved by a copy of the invoice and the serial no. of the product.

The warranty period is 12 months after the date of purchase, unless otherwise agreed, and must be proved by the documentation mentioned above.

Repairs will be carried out by ActSafe or an authorized service dealer. Please contact ActSafe for your nearest service dealer.

Limitation of liability

The cost of transportation of the product to and from the Authorized Service dealer is the responsibility of the Customer.

ActSafe cannot be held liable for:

- Periodic inspection, maintenance and repair or replacement of parts as a result of normal use.
- Consumption of consumable materials.
- Modifications made without ActSafes authorization.
- Defects due to modifications that have been made without the consent of ActSafe.
- Costs due to the necessity of adapting or modifying the product as a result of new national or international standards.

Repair under warranty will not be made if damage has arisen due to:

- Improper use or abusive handling of the product.
- Insufficient maintenance.
- The use of spares and other parts that are not compatible with the product.
- Repairs and modifications done by personnel not authorized by ActSafe.
- Insufficient packing of the product when sending it to ActSafe or an authorized service dealer.
- Accident, natural catastrophe or circumstances beyond the control of ActSafe.

TECHNICAL DATA

NOTE ! The performance is tested with an unused 11 mm, unwatered rope at room temperature.

PERFORMANCE/PART	VALUE	COMMENT
Rope	Static / Semi Static rope 10-13 mm EN1891	
Max working load	300 kg	
Safe Working Load (SWL)	200 kg	
Rescue	250 kg	
Ascent speed	0-17 m/min (100 kg load)	Continuous adjustment.
Recommended temperature range	-20 °C til + 40°C	The ascender can be used at other temperatures as well.
Weight	10.4 kg	Excluding fuel.
Dimentions	47 x 25 x 28 cm	

Technical data engine

PERFORMANCE/PART	VALUE	COMMENT
Engine	Honda GX35	
Reduction rate	43:1	
Type	Forced air-cooled 4-stroke OCH, single cylinder	
Displacement	35.8 cc	
Spark	CMR5H (NGK)	
Clutch	Centrifugal clutch	
Fuel	Alcylate 95-octane unleaded 4 stroke petrol	Normal 4-stroke unleaded petrol 91-octane or higher may also be used.
Fuel tank	0.65 L	
Engine oil	SAE 10W-30	

APPENDIX

Declaration of conformity and EC Type test Certificate.

ActSafe

Declaration of conformity

In accordance with Machinery Directive 2006/42/EC, appendix II A

ActSafe Systems AB
Sagbäcksvägen 13
SE43731 Lindome, Sweden

We hereby declare that the power ascender type ActSafe PME (4-stroke) for the lifting and lowering of loads and persons meets the fundamental requirements of the below stated EC directives:

EC Machinery Directive (MD) 2006/42/EC
Chapter 4 (lifting) and chapter 6 (lifting of persons)

Swedish Professional Association AFS 1994:48

The design was inspected by / standard control certificate no. 04015 issued by:

Hauptverband der gewerblichen (notified body) Berufsgenossenschaften, 0547.

Lindome 2009-12-29

ActSafe Systems AB

Magnus Glans
Managing Director

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SWEDEN

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www.actsafe.se
VAT: SE556035133901

SERVICE CARD

ActSafe Serial No:	
Year of manufacture	
Date of purchase	
Date first put into service	
Name of owner	

Date of service		
DATE	**INSPECTOR**	OK

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.....
Signature

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