

International assembly and repair
instructions

Xlevator

Languages:

EN, DE, SL



fEX Engineering GmbH

Höltenweg 49
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Third edition

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Foreword

Thank you for purchasing an **Xlevator** chair bracket from fEX Engineering GmbH.

The Xlevator guarantees that the powered **Xpedition** stair chair made by Stryker is properly secured. Power-assisted linear movement ensures ergonomic handling when removing or stowing it in a rescue vehicle.

WARNING

Improper handling or any unintended use may cause incur risk or cause damage. Please therefore read these instructions for use carefully and follow them closely. Retain them for reference at all times. To prevent personal injury or damage to property, please observe all safety precautions.

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Contents

1	How to use these Assembly and repair instructions	1
1.1	Feedback on these Instructions for use	1
1.2	Explanation of the warnings used in these Instructions for use	1
2	Product description	1
2.1	Intended use.....	1
2.2	Product overview	2
2.3	How it works.....	3
2.4	Symbols used.....	3
2.5	Use in combination with other products	4
2.6	Delivery.....	4
2.7	Modifications.....	4
2.8	Requirements for storage, handling and environmental conditions	4
2.9	Product service life	4
2.10	Warranty.....	4
3	Installation on a rear door or wall	5
3.1	Requirements for personnel involved	5
3.2	General	5
3.3	Screw connections.....	6
3.4	Gas spring and oil brake	7
3.5	Wheel mount.....	8
3.6	To check for correct assembly.....	8
4	Maintenance.....	9
4.1	Maintenance.....	10
4.2	Maintenance by technicians.....	10
4.3	Gas spring, oil brake and cylinder connector	10
4.4	Replacing the gas spring.....	11
4.5	Replacing the oil brake	12
4.6	Replacing the locking unit	13
4.7	Lubricating the guide rails	14
5	Dismantling, recycling, disposal	15
5.1	Dismantling.....	15
5.2	Recycling, disposal.....	15
5.3	Disposal through fEX Engineering GmbH	15
6	List of individual parts	16

1 How to use these Assembly and repair instructions

If you have any questions about the contents of these instructions for use or how to use the product, please contact us. You can request a paper copy of these instructions for use or download the current, digital version from our website:

<https://www.fex.group/downloads>

Should you need further assistance after carefully reading these Instructions for use and additional information, please contact your authorised distributor or contact us directly.

1.1 Feedback on these Instructions for use

Your opinion is important to us. Please let us know if there is anything you would change about these Instructions for use (engineering@fex.group). We will take your feedback into account in the next version of these Instructions for use.

1.2 Explanation of the warnings used in these Instructions for use

Signal word	Description
 WARNING	Potentially hazardous situation resulting in severe injury or death.
 CAUTION	Potential hazard resulting in minor or moderate injury.
NOTE	User error can damage the product.

Table 1: Explanation of the warning notices used in these Instructions for use

2 Product description

2.1 Intended use

The Xlevator is designed as a professional securing device for the powered **Xpedition** stair chair made by *Stryker*. The system is intended to raise and lower the *Xpedition Chair* between its stowed position and ground level. Power-assisted linear movement ensures ergonomic handling when removing or stowing it in a rescue vehicle.

2.2 Product overview

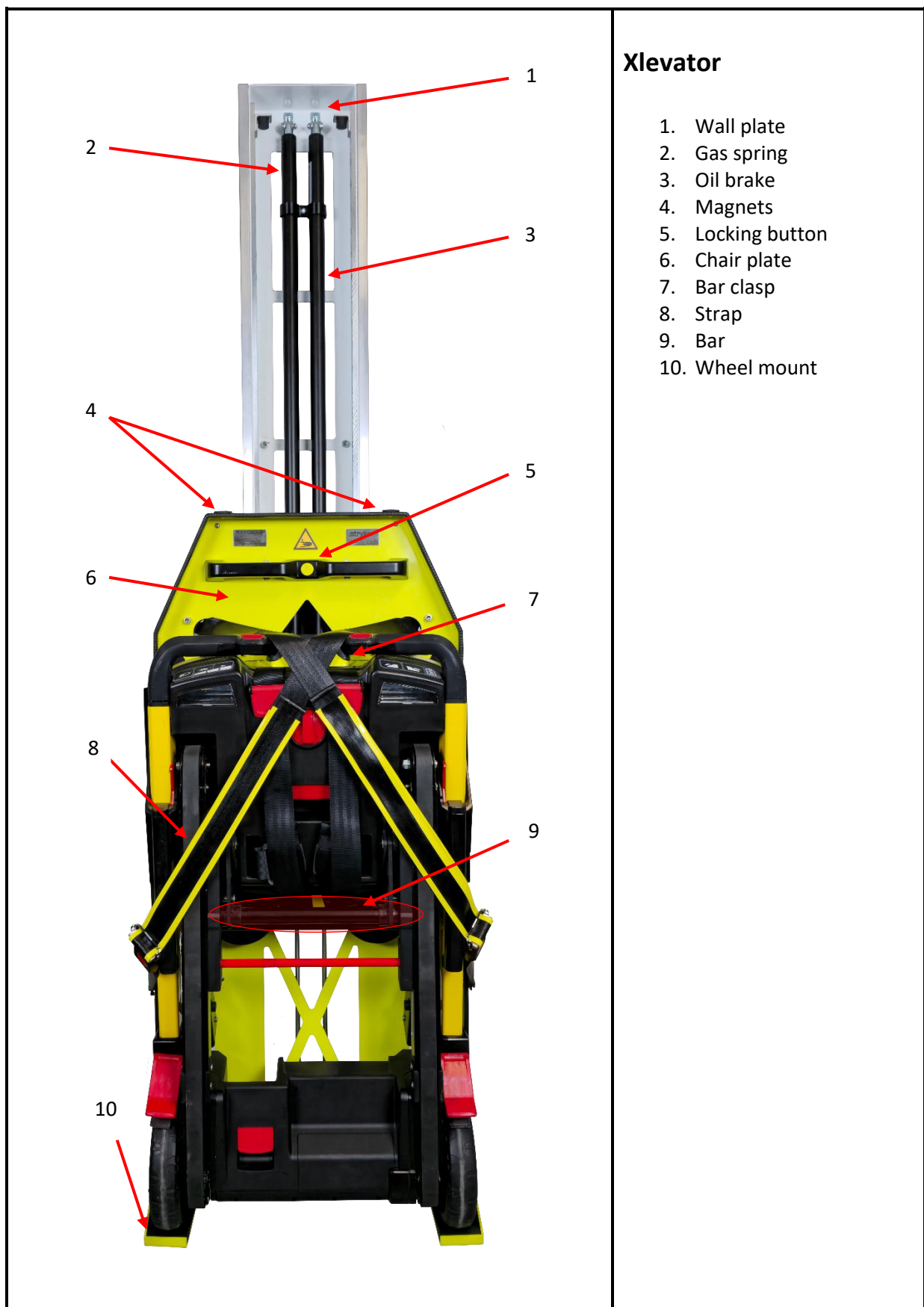


Table 2: Product overview

2.3 How it works

The Xlevator is an accessory for the powered *Xpedition* stair chair made by *Stryker*. It consists of a frame, a wall plate and movable carriage and a chair plate. These two elements are connected to one another with a linear movement, and can therefore be moved vertically. A gas spring and an oil brake are installed between the chair plate and the wall plate. The gas spring supports upward movement so that the user need not exert a lot of strength to stow the *Xpedition* in the emergency services vehicle. In contrast, the oil brake ensures that the chair plate rises in a controlled manner on empty trips. The built-in locking mechanism enables the *Xpedition* to be secured in incremental vertical positions. The handle bar of the *Xpedition* locks behind the bar clasp at the top of the chair plate. The wheels fit into two wheel mounts at the bottom of the chair plate. The *Xpedition* is then secured with two straps.

2.4 Symbols used



Figure 1: Labels



Figure 2: Caution: Crush hazard

Symbol	Meaning
	Manufacturer's logo
	Manufacturer, address and contact details
	Conformity marking
	Read Instructions for use
	Caution: Crush hazard
S/N	2024 03 06 001 Year of construction/Month/Date/Batch number

Table 3: Symbols used and their meanings

2.5 Use in combination with other products

The Xlevator is designed exclusively for carrying and securing the powered Xpedition stair chair made by *Stryker*. Only this product can be stowed and transported with adequate safety. The screw connections in the vehicle must withstand a force of 5000 N.

2.6 Delivery

The product is delivered in non-sterile, non-disinfected condition.

An electronic copy of the Instructions for use can be found via the following link:

<https://www.fex.group/downloads/>

A sticker on the system shows a QR code and the above link, both of which will take you to the electronic copy of the Instructions for use. This sticker must be removed before use.

2.7 Modifications

Unauthorised modifications to this product are prohibited.

2.8 Requirements for storage, handling and environmental conditions

Category	Information
Permitted humidity limits	5% - 98%
Permitted temperature limits (vehicle & storage)	10°C to +50°C
Maximum storage time before use. Cylinders can remain in the same position for a maximum of 6 months.	6 months

Table 4: Storage during transport, before and after use

2.9 Product service life

Under normal usage conditions and with appropriate maintenance, the service life is **seven years**.

The date for the product's service life is based on the delivery date from fEX Engineering.

2.10 Warranty

The Xlevator is subject to a statutory warranty of **two years** under EU and German law.

The oil brake, gas spring and straps are excluded from the above warranty. A **one-year** warranty applies to these components.

3 Installation on a rear door or wall

3.1 Requirements for personnel involved

Installation, maintenance and repair can be carried out by the operator and his personnel and by vehicle manufacturers if the instructions below are followed. It is the responsibility of the technical manager to appoint a qualified person to do the work.

3.2 General

The Xlevator is attached to the vehicle using screw connections. For this purpose, the screw connections shown in Figure 3 must be present. These screw connections must be able to withstand a total tensile force of 5000 N.

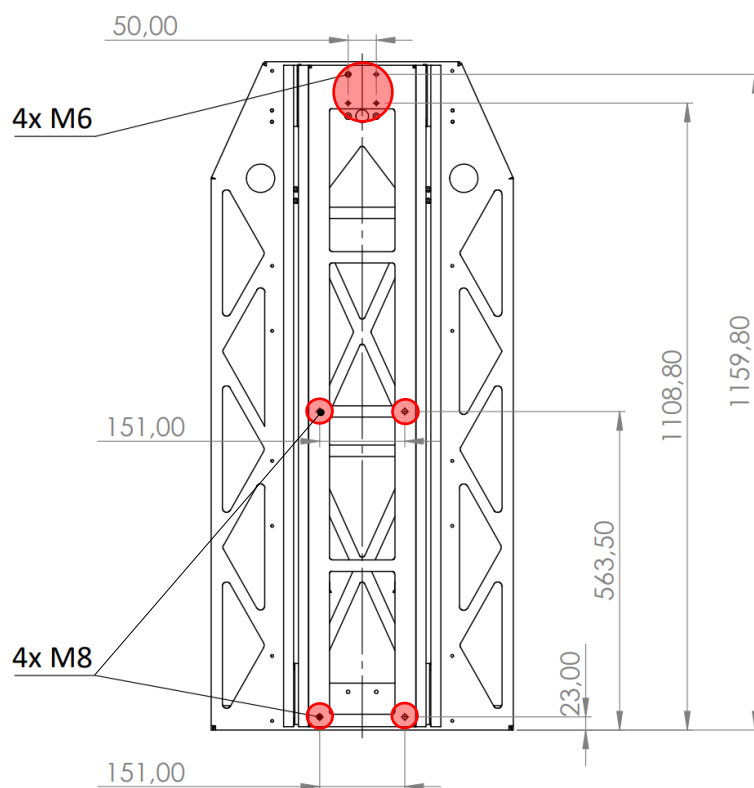


Figure 3: Screw connections

⚠ CAUTION

A torque wrench must be used for assembly and the specified torques must be observed.

⚠ WARNING

Medium-strength screw locking is strongly recommended. The required curing time depends on the information given by the screw locking manufacturer.

The Xlevator is delivered in non-disinfected condition. You must disinfect the system before first use. Instructions for disinfection can be found in the separate document "*Instructions for use - Xlevator*".

3.3 Screw connections



Figure 5: Positioning the wall plate

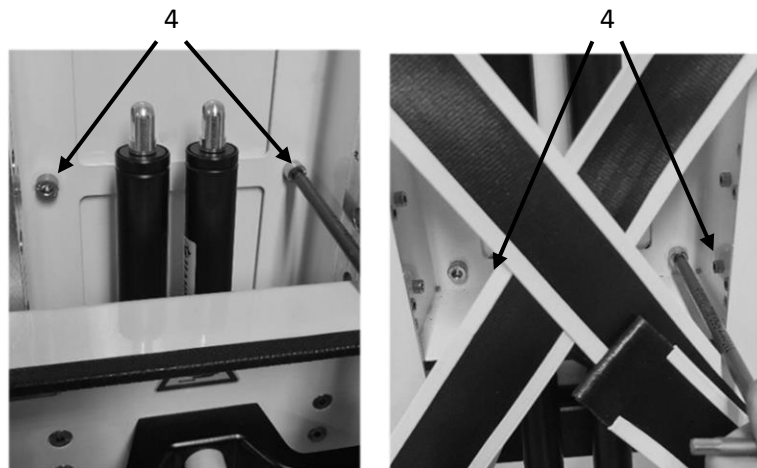


Figure 4: Position M8 screws

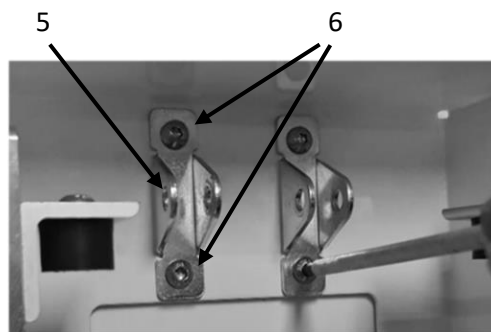


Figure 6: Mounting the brackets

Follow the steps below:

1. Press the locking button (1) and pull the wall plate (2) upwards so that the through holes (3/4) line up with the riveting nuts (Fig. 4) (the system may also need to be lined).
2. Apply a drop of medium-strength screw locking to the first (lowest) threads on **all** screws.
3. Fasten the wall plate (2) to the vehicle using the four M8x16 (round head) screws (4) and a tightening torque of 22 Nm (Fig. 5).
4. Place the bracket (5) on the wall plate (2) and fasten it with two M6x16 (round head) screws (6) each using a tightening torque of 13 Nm (Fig. 6).
5. Repeat this for the second bracket.

3.4 Gas spring and oil brake

⚠ CAUTION

The gas spring is pre-tensioned when it is delivered. Follow the steps in the instructions to avoid injury or damage.



Fig. 7: Position of cylinder

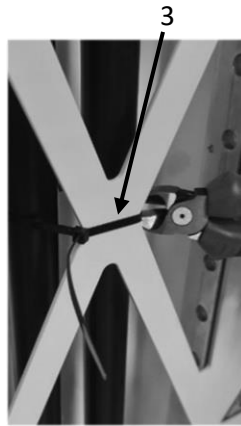


Fig. 8: Cable retainer



Fig. 9: Cylinder connector



Fig. 10: Assembly aids

Follow the steps below:

1. Press the locking button (1) and pull the chair plate upwards so that the through holes for the cylinders line up with the bracket through holes (2) (Fig. 7).
2. Cut the cable retainer (3) halfway up the system (Fig. 8).
3. Connect the cylinders and the brackets using the bolts (4) and the self-locking M6 nut (5) with a tightening torque of 11 Nm (Fig. 9).
4. Press the locking button (1) again, pull the chair plate down a few notches and remove the assembly aids (6) (Fig. 10).

3.5 Wheel mount

The Xlevator has one left and one right wheel mount (Fig. 10) (1). The wheel mounts are symmetrical. On the underside of the wheel mounts, one edge is right-angled and the other is rounded.

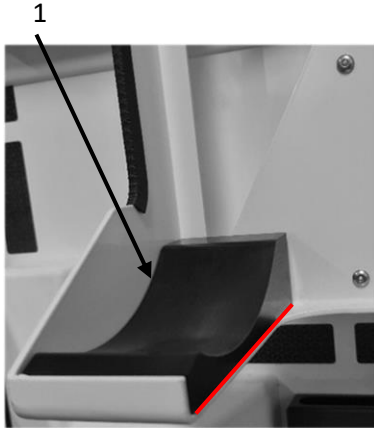


Figure 11: Left wheel mount

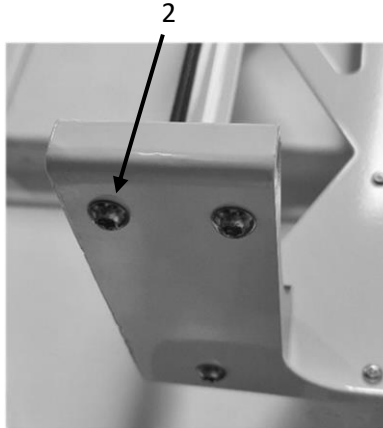


Figure 12: Screw connections for wheel mount

Follow the steps below:

1. Place the left (Fig. 11, 1) and the right wheel mount in the chair plate (Fig. 12).
2. The right-angled inner edge marked in red (Fig. 11) is fitted flush. The opposite outer edge is rounded to fit over the weld seam. The right wheel mount is a mirror image of the left.
3. Apply a drop of medium-strength screw locking to the first (lowest) threads on **all** screws.
4. Attach the new wheel mount (1) using the three new M8x12 countersunk head screws (2) with a tightening torque of 8 Nm.

3.6 To check for correct assembly

WARNING

Use the check list below to make sure the system is assembled or installed correctly. If any of these points do not apply, the product must be reassembled or reinstalled.

- All necessary screws must be used and no through holes should be visible: four M8x16 (flat head), four M6x16 (raised head), six M8x10 (round head)
- All screws should be flush and tightly screwed (use a torque wrench for assembly).
- Unhindered up and down movement
- The gas spring supports lifting
- The oil brake controls the speed when moving upwards (empty trip)
- The system can be locked into different positions
- The straps are undamaged and working

Following the proper assembly, the Xlevator is ready for immediate use.

4 Maintenance

The operator and his staff can maintain the product by following the instructions. Unauthorised repairs to this product are prohibited. The operator is permitted to replace certain components; these are divided into two groups:

1. Components that can be replaced by **users (laymen)** (instructions in the separate document ***Instructions for use – Xlevator***), e.g. straps
2. Components that must be replaced by **technicians** (Section 4.2 *Maintenance by technicians*), e.g. the gas spring

It is the operator's responsibility to employ suitable, qualified and trained personnel carry this out. A video on how to maintain the Xlevator is available on the manufacturer's homepage.

 WARNING

Medium-strength screw locking is strongly recommended. The required curing time depends on the information given by the screw locking manufacturer.

 WARNING

Only replacement parts made by fEX Engineering GmbH may be used. Using other parts may be dangerous. Repairs are prohibited.

The Instructions for use are decisive for all work on the product. Once damaged components have been replaced, the system can be put back into use.

fEX Engineering GmbH refuses to supply spare parts for, or carry out repairs on, any products that have reached the end of their service life.

4.1 Maintenance

The guide rails must be lubricated as required. This depends on various factors, including the frequency/intensity of their cleaning, but must take place **at least once a year** (Section 8.4.5 *Lubricating the guide rails*).

A visual inspection must be made every week (instructions in the document *Instructions for use – Xlevator*). Faulty components should be replaced as necessary.

4.2 Maintenance by technicians

The parts listed below can be replaced by trained technicians (training video) with original spare parts. These can be ordered upon request.

- Cylinder connector (Item no. fEX0140ZV)
- Gas spring (290 Nm) (Item no. fEX0140ZF)
- Oil brake (2,7 mm) (Item no. fEX0140OB)
- Locking unit (Item no. fEX0140VE)
- Locking button (yellow) (Item no. fEX0140KG)
- Locking button (red) (Item no. fEX0140KR)

WARNING

Only replacement parts made by fEX Engineering GmbH may be used. Using other parts may be dangerous.

4.3 Gas spring, oil brake and cylinder connector

Only a trained technician (training video) is permitted to replace these parts. Both the gas spring and the oil brake must be installed with the piston rod pointing downwards. The gas spring and the oil brake can be differentiated by the length of their cylinders. **The cylinder of the gas spring is approx. 6 cm longer than the cylinder of the oil brake (Fig. 13).**

The cylinder connector is clamped around both cylinders with a screw and must be positioned almost at the bottom.

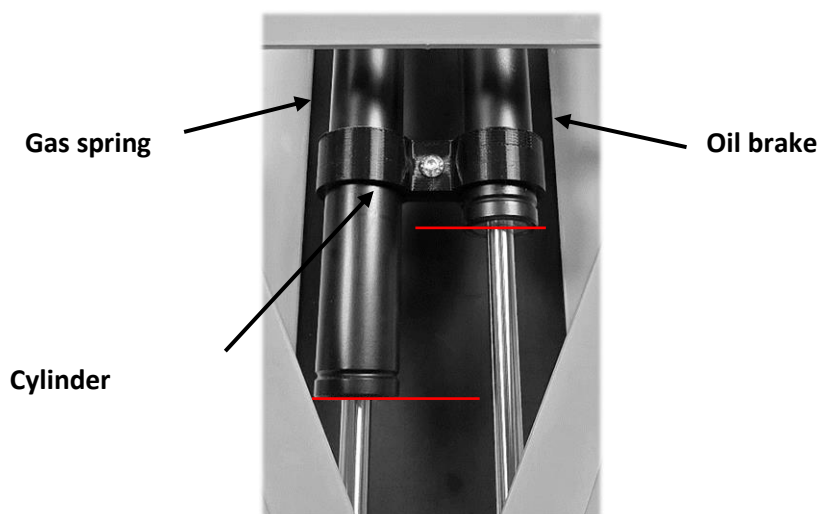


Figure 13: Identifying the cylinder

4.4 Replacing the gas spring

Only a trained technician (training video) is permitted to replace the gas spring.

⚠ CAUTION

The gas spring is pre-tensioned when it is delivered. Follow the steps in the instructions to avoid injury or damage.

Follow the steps below:

1. Move the system to its lowest position and lock into place.
2. Loosen the screw of the cylinder connector (1) (Fig. 14) and pull it down so that it hangs freely over the piston rods.
3. Identify the gas spring (see Section 3.3 *Gas spring, oil brake and cylinder connector*)
4. Place **both** assembly aids (2) (Fig. 15) over the piston rod on the gas spring.
5. Let the system move up as far as possible (assembly aid blocks the last part of the travel path).
6. Loosen the nut (3) on the upper bracket (Fig. 16) and remove the bolt (4).
7. Move the system down one notch and let it snap into place.
8. Repeat step 6 on the lower bracket.
9. Remove the gas spring from below.
10. Insert the new gas spring with the piston rod facing downwards. Guide the cylinder connector over the piston rod.
11. Connect the cylinder and the **lower** bracket using the bolt and the self-locking M6 nut with a tightening torque of 11 Nm.
12. Press the locking button and pull the chair plate upwards so that the through holes of the cylinders line up with the bracket through holes (Fig. 16).
13. Connect the gas spring and the **upper** bracket (Fig. 16) with the bolt (4) and the self-locking M6 nut (3) using a tightening torque of 11 Nm.
14. Pull the cylinder connector over both cylinders (Fig. 14) and fasten it to the M5x10 screw (round head) (1) using a tightening torque of 5 Nm.
15. Use the product to check it is working properly.



Fig. 14: Cylinder connector

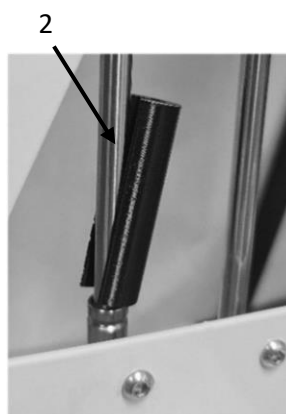


Fig. 15: Assembly aids



Fig. 16: Upper bracket

4.5 Replacing the oil brake

Only a trained technician (training video) is permitted to replace the oil brake.

Follow the steps below:

1. Move the system to the middle position and lock into place.
2. Loosen the screw of the cylinder connector (1) (Fig. 17) and pull it down so that the cylinder connector hangs freely over the piston rods.
3. Identify the gas spring (see Section 8.5.1 *Gas spring, oil brake and cylinder connector*).
4. Loosen the nut (2) on the upper bracket (Fig. 18) and remove the bolt (3).
5. Loosen the nut on the lower bracket and remove the bolt.
6. Remove the oil brake from below.
7. Insert the new oil brake with the piston rod facing downwards. Guide the cylinder connector over the piston rod.
8. Connect the cylinder and the **lower** bracket using the bolt and the self-locking M6 nut with a tightening torque of 11 Nm.
9. Pull the oil brake upwards by hand so that the through holes of the cylinder line up with the bracket through holes.
10. Connect the cylinder and the **upper** bracket (Fig. 18) with the bolt (3) and the self-locking nut (2) using a tightening torque of 11 Nm.
11. Pull the cylinder connector (Fig. 17) over both cylinders and fasten it with the M5x10 screw (round head) (1) using a tightening torque of 5 Nm.
16. Use the product to check it is working properly.



Fig. 17: Cylinder connector



Fig. 18: Upper bracket

4.6 Replacing the locking unit

Only a trained technician (training video) is permitted to replace the locking unit.

CAUTION

The chair plate must be in the highest position because the system moves upwards automatically. Follow the steps in the instructions to avoid injury or damage.

Follow the steps below:

1. Move the system to the middle position and let it lock into place.
2. Place **both** assembly aids (2) (Fig. 15) over the piston rod on the gas spring.
3. Press the locking button and let the system move up until the assembly aids fit.
4. Remove the handle by loosening the four M5x12 screws on the back of the chair plate.
5. Put your hand behind the locking unit and hold it firmly.
6. Remove the four countersunk head screws.
7. Turn the entire locking unit by approx. 45° and remove the unit.
8. Apply a drop of medium-strength screw locking to the new countersunk head screws.
9. Take the replacement unit and rotate it into position under the button. The button may need to be turned slightly so that the unit is flush with the plate.
10. Press the unit onto the plate and turn the unit back (approx. 45°).
11. Screw in the accompanying M6x16 (countersunk head screw) screws using a tightening torque of 10 Nm.
12. Move the system back to the middle position and let it lock into place.
13. Remove the two assembly aids.
14. Then check that the lock works in different positions.

4.7 Lubricating the guide rails

The rails should be lubricated as necessary, but **at least once a year**. As foreign bodies can get into the rails, these must be cleaned first. An NLGI Class 2 or similar lubricant must be used.

Follow the steps below:

1. Move the system to the lowest position.
2. Clean the rails with a dry cloth.
3. Lubricate both track surfaces on the rails (Fig. 19 and Fig. 20).
4. Repeat steps 2 and 3 for all four rails.
5. Move the system up and down to spread the lubricant.
6. Do **not** remove excess lubricant from inside the rails.

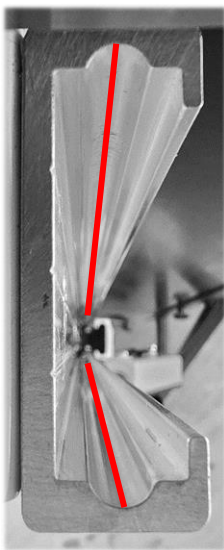


Figure 19: Wall plate rails

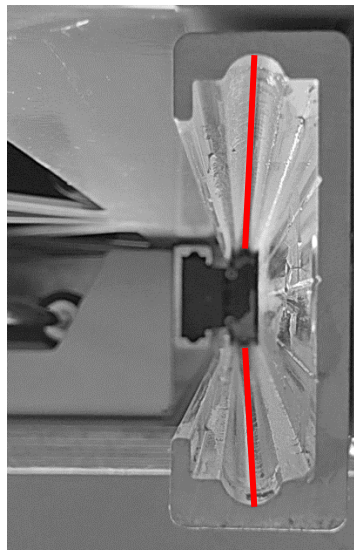


Figure 20: Chair plate rails

5 Dismantling, recycling, disposal

5.1 Dismantling



The product must be cleaned and disinfected before being dismantled. Components that have been dismantled or damaged may have sharp edges.

The operator and his personnel may dismantle the product. It is the operator's responsibility to have qualified personnel carry this out. The product is dismantled in the reverse order of its assembly.

5.2 Recycling, disposal

When disposing of the product, always follow **current local** recommendations, and/or statutory provisions on environmental protection and risk relating to recycling or the disposal of devices at the end of their useful life.

5.3 Disposal through fEX Engineering GmbH

If the product has to be taken out of service due to damage or other reasons, the Xlevator (and all other fEX Engineering GmbH products) can be sent to the company's address for free disposal.

6 List of individual parts

Variant	Replacement part	Description	Item number
Xlevator - Rear door 1 - fEX014BD1	Strap (lock side)	Standard	FEX014GS1
	Strap (latch side)	Standard	FEX014GZ1
	Strap (lock side)	Hygiene+	FEX014GS2
	Strap (latch side)	Hygiene+	FEX014GZ2
	Strap holder		FEX0140GH
	Left wheel mount		FEX014RAL
	Right wheel mount		FEX014RAR
	Edge protector	long	FEX014KS2
	Sticker	Crush hazard	FEX0140QG
	Reflective strips	Red	FEX0140RR
	Handle		FEX01400G
	Locking button	Yellow	FEX0140KG
	Locking button	Red	FEX0140KR
	Locking unit	Full	FEX0140VE
	Bar clasp		FEX0140BH
	Guide rail		FEX0140GL
	Cylinder connector		FEX0140ZV
	Gas spring	290 N	FEX0140ZF
	Oil brake	2.7 mm	FEX0140OB
	Holding plate		FEX014HB1

Table 5: List of individual parts

Navodila za montažo in popravila **Xlevator**

Jezikovna različica:

EN, DE, **SL**



fEX Engineering GmbH

Höltenweg 49
48155 Münster
Nemčija

Tretja izdaja

Datum izdaje: 22. 7. 2024



Predgovor

Zahvaljujemo se vam za nakup držala za vzpenjalnik **Xlevator**, proizvod podjetja fEX Engineering GmbH.

Xlevator zagotavlja profesionalno pritrditev tovora na električni stopniščni vzpenjalnik **Xpedition** podjetja Stryker. Linearno gibanje s pomočjo elektrike zagotavlja ergonomsko rokovanje pri odstranjevanju in shranjevanju v reševalnem vozilu.



Nepravilna in nenamenska uporaba lahko povzroči nevarnosti in škode. Zato vas prosimo, da ta navodila za uporabo skrbno preberete in jih natančno upoštevate. Navodila naj bodo vedno na dosegu roke. Da preprečite telesne poškodbe in materialno škodo, upoštevajte varnostna navodila.

Glede jezika teh navodil za uporabo

Dandanes je pomembno uporabljati pravilen jezik kot odraz družbe. V fEX Engineering GmbH želimo, da se vsi ljudje počutijo opažene in spoštovane, ne glede na njihovo spolno identiteto.

Na tej točki vas prosimo za razumevanje, da v naših navodilih za uporabo uporabljamo moški spol kot generični spol (moška oblika, ki pomeni vse spole). Namen je zgolj lažja berljivost in razumljivost.

Vaša inženirska ekipa fEX

Kontaktne podatke proizvajalca



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Kazalo

1	Informacije o uporabi teh navodil za montažo in popravila	1
1.1	Povratne informacije o navodilih za uporabo	1
1.2	Razlaga opozoril, uporabljenih v teh navodilih za uporabo	1
2	Opis izdelka.....	1
2.1	Predvidena uporaba	1
2.2	Pregled izdelka.....	2
2.3	Princip delovanja	3
2.4	Uporabljeni simboli	3
2.5	Kombinacija z drugimi izdelki	4
2.6	Dobava.....	4
2.7	Spremembe na pripomočku	4
2.8	Zahtevani pogoji za shranjevanje, ravnanje in okolje	4
2.9	Življenjska doba izdelka	4
2.10	Garancija.....	4
3	Montaža na zadnja krilna vrata ali steno	5
3.1	Zahteve za izvedbeno osebje	5
3.2	Splošno	5
3.3	Vijačni spoj.....	6
3.4	Plinska natezna vzmet in oljna zavora.....	7
3.5	Nosilec koles	8
3.6	Preverjanje pravilne montaže	8
4	Vzdrževanje	9
4.1	Vzdrževanje	10
4.2	Pregled s strani tehnikov	10
4.3	Natezna vzmet, oljna zavora in konektor valjev.....	10
4.4	Nadomestna plinska natezna vzmet	11
4.5	Menjava oljne zavore	12
4.6	Izmenljiva enota z zaklepnim mehanizmom	13
4.7	Ponovno mazanje tekalnih vodil	14
5	Demontaža, recikliranje, odstranjevanje	15
5.1	Demontaža	15
5.2	Recikliranje, odstranjevanje	15
5.3	Odstranjevanje prek podjetja fEX Engineering GmbH	15
6	seznam posameznih delov	16

1 Informacije o uporabi teh navodil za montažo in popravila

Če imate kakršna koli vprašanja o vsebini teh navodil za uporabo ali o načinu uporabe izdelka, stopite z nami v stik. Navodila za uporabo so na voljo za prenos v digitalni obliki in v trenutni različici na naši spletni strani in jih lahko od nas zahtevate tudi v papirni obliki:

<https://www.fex.group/downloads>

Če kljub natančnemu preučevanju navodil za uporabo in nadaljnjim informacijam potrebujete dodatno pomoč, se obrnite na svojega lokalnega distributerja ali z nami vzpostavite neposreden stik.

1.1 Povratne informacije o navodilih za uporabo

Vaše mnenje nam je pomembno. Sporočite nam svoje želje in povratne informacije glede teh navodil za uporabo (engineering@fex.group). Vaše povratne informacije bomo upoštevali pri pripravi naslednje različice navodil za uporabo.

1.2 Razlaga opozoril, uporabljenih v teh navodilih za uporabo

Opozorilna beseda	Opis
 OPOZORILO	Možna nevarna situacija, ki lahko ima za posledico težke poškodbe ali smrt.
 SVARILO	Možna nevarnost, ki lahko ima za posledico manjše ali zmerne poškodbe.
NAPOTEK	Napake pri upravljanju lahko povzročijo poškodbe izdelka.

Tabela 1: Razlaga opozoril, uporabljenih v teh navodilih za uporabo

2 Opis izdelka

2.1 Predvidena uporaba

Xlevator je zasnovan za profesionalno pritrditev tovora na električni stopniščni vzpenjalnik **Xpedition** podjetja Stryker. Sistem je zasnovan za dviganje in spuščanje *vzpenjalnika Xpedition* med zloženim položajem in nivojem tal. Linearno gibanje s pomočjo elektrike zagotavlja ergonomsko rokovanje pri odstranjevanju in shranjevanju v reševalnem vozilu.

2.2 Pregled izdelka

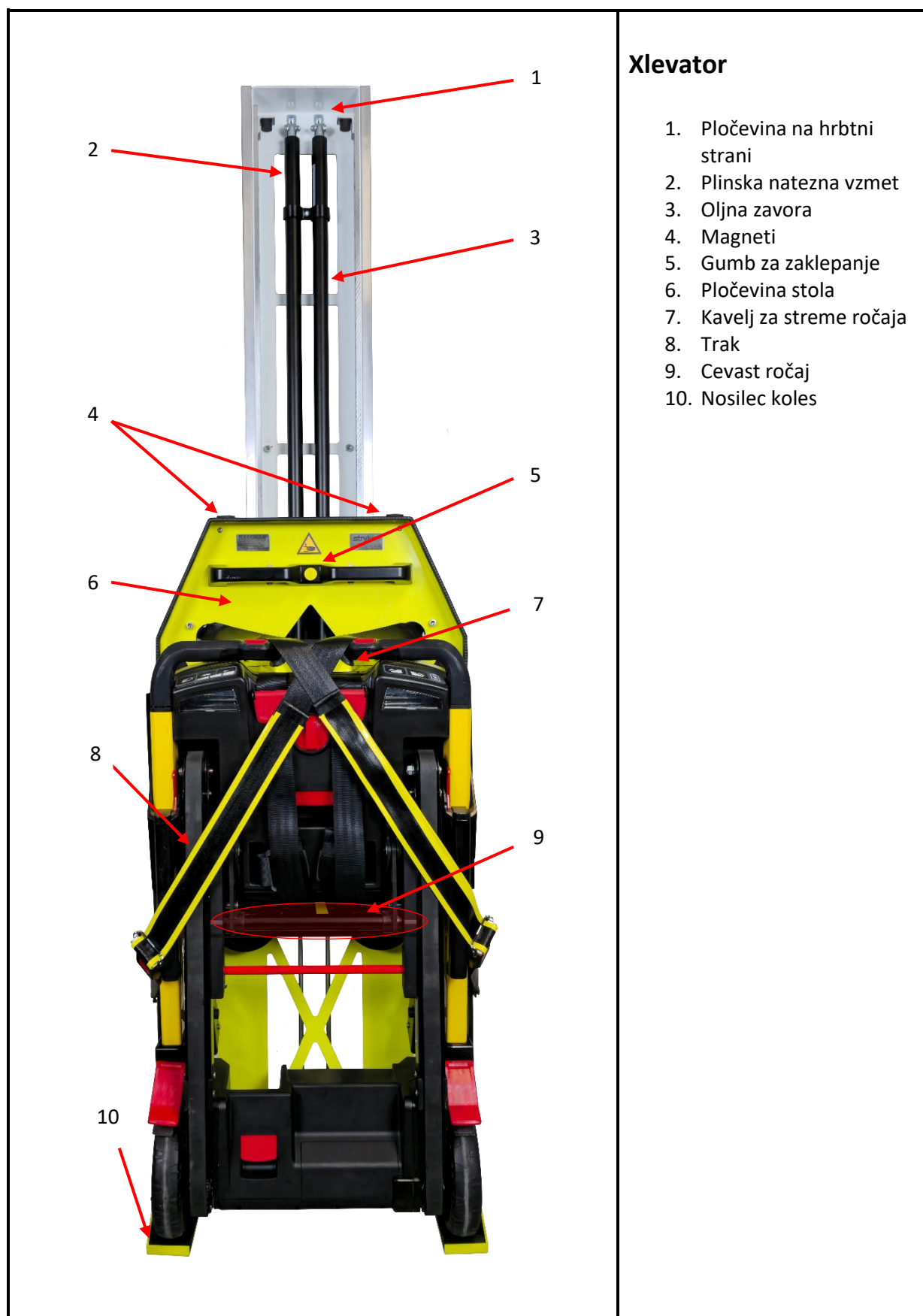


Tabela 2: Pregled izdelka

2.3 Princip delovanja

Xlevator je dodatni element za električni stopniščni vzpenjalnik *Xpedition* podjetja *Stryker*. Sestavljen je iz okvirja, pločevine na hrbtni strani in premičnih sani, pločevine stola. Ta dva elementa sta med seboj povezana z linearnim gibanjem in ju je zato mogoče premikati navpično. Med pločevino stola in pločevino na hrbtni strani sta nameščeni plinska natezna vzmet in oljna zavora. Vzmet podpira gibanje navzgor, tako da uporabnik ne potrebuje veliko mero lastne moči, da *Xpedition* pospravi v vozilo. Oljna zavora pa zagotavlja nadzorovano uporabo pločevine stola brez bremena v smeri navzgor. Vgrajen zaklepni mehanizem omogoča postopno pritrditev v različnih navpičnih položajih. Streme ročaja *Xpedition* je zaskočeno za kavljem za streme ročaja na zgornjem koncu pločevine stola. Kolesi se prilegata v nosilce za kolesa na dnu pločevine stola. *Xpedition* je nato zavarovan z dvema trakovima.

2.4 Uporabljeni simboli



»Neuporabljen prostor za
 identifikacijo lastnika«

Product: **Xlevator**
 Item no.: fEX014XL1
 S/N: 20240306001



Slika 1: plakete



Slika 2: Pozor – nevarnost zmečkanin

Simbol	Pomen
	Logotip proizvajalca
	Proizvajalec, naslov in kontaktni podatki
	Oznaka skladnosti
	Preberite navodila za uporabo
	Pozor – nevarnost zmečkanin
S/N	2024 03 06 001 Letnik/mesec/dan/št. lota

Tabela 3: uporabljeni simboli in njihov pomen

2.5 Kombinacija z drugimi izdelki

Xlevator je zasnovan izključno za nošenje in pritrditev na električni stopniščni vzpenjalnik Xpedition podjetja Stryker. Samo ta izdelek je dovolj varno skladiščiti in prenašati. Točke pritvja na vzpenjalniku morajo prenesti skupno silo 5000 N.

2.6 Dobava

Izdelek je dobavljen nesterilen in nerazkužen.

Navodila za uporabo so na voljo v digitalni obliki na naslednji povezavi:

<https://www.fex.group/downloads/>

Na sistemu je nalepka s QR kodo in zgoraj omenjeno povezavo, ki vodi do digitalnih navodil za uporabo. To nalepko morate pred uporabo odstraniti.

2.7 Spremembe na pripomočku

Nepooblaščenke spremembe pripomočka niso dovoljene.

2.8 Zahtevani pogoji za shranjevanje, ravnanje in okolje

Kategorija	Specifikacija
Dovoljeni pogoji vlažnosti	5 % – 98 %
Dovoljeni temperaturni pogoji (vozilo in skladiščenje)	10 °C do +50 °C
Najdaljši čas shranjevanja pred uporabo. Valji lahko ostanejo nedelujoči največ 6 mesecev.	6 mesecev

Tabela 4: skladiščenje med transportom, kot tudi pred in po uporabi

2.9 Življenjska doba izdelka

Pod normalnimi pogoji uporabe in ob ustreznem vzdrževanju je življenjska doba **sedem let**.

Te informacije o življenjski dobi se nanašajo na datum dobave s strani podjetja fEX Engineering.

2.10 Garancija

Za Xlevator velja zakonsko predpisano garancijsko obdobje **dveh let** v skladu s pravom EU in nemško zakonodajo.

Iz zgoraj navedenega garancijskega obdobja so izvzete oljne zavore, plinske pritezne vzmeti in trakovi. Za te komponente velja garancijsko obdobje **enega leta**.

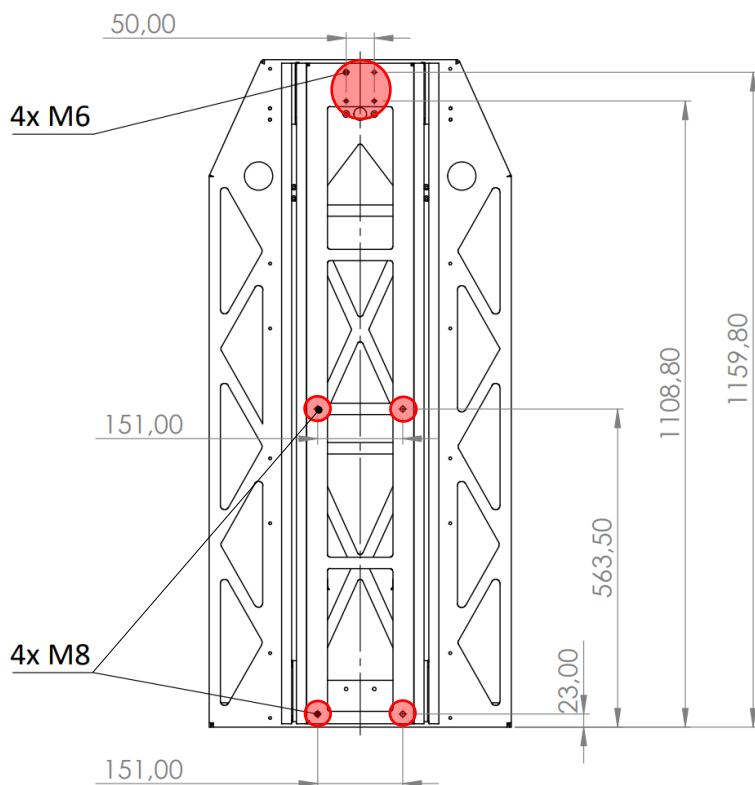
3 Montaža na zadnja krilna vrata ali steno

3.1 Zahteve za izvedbeno osebje

Montažo, vzdrževanje in popravila lahko izvaja upravljevec in njegovo osebje ter proizvajalci vozil, če se upoštevajo naslednja navodila. Tehnični vodja je odgovoren, da za to pooblasti usposobljeno osebo.

3.2 Splošno

Xlevator je na vozilo pritrjen z vijaknimi spoji. V ta namen morajo biti prisotne točke pritvija prikazane na sliki 3. Te točke pritvija morajo prenesti skupno natezno silo 5000 N.



Slika 3: točke pritvija



SVARILO

Za montažo morate uporabiti navorni ključ in upoštevati navedene pritezne navore vijakov.



OPOZORILO

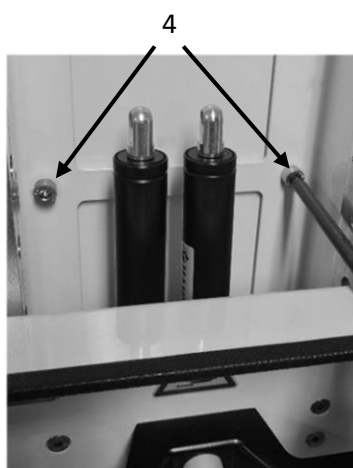
Vedno je treba uporabiti vijačna varovala srednje trdnosti. Čas, potreben za strjevanje, je naveden v podatkih proizvajalca vijačnega varovala.

Xlevator je dobavljen nerazkužen. Pred prvo uporabo sistem razkužite. Navodila za razkuževanje najdete v ločenem dokumentu *Navodila za uporabo Xlevatorja*.

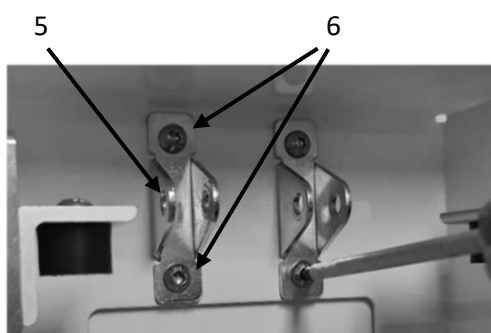
3.3 Vijačni spoj



Slika 5: namestitev pločevine na hrbtni strani



Slika 4 : položaj, vijaki M8



Slika 6: montaža okovja

Izvedite naslednje korake:

1. pritisnite gumb za zaklepanje (1) in povlecite pločevino na hrbtni strani (2) navzgor, tako da se predhodne izvrtine (3/4) poravnajo z matičnimi zakovicami (slika 4) (sistem bo morda treba dodatno podložiti).
2. Na prve (najnižje) navoje **vseh** vijakov nanesite kapljico sredstva za varovanje navojev srednje trdnosti.
3. Pločevino na hrbtni strani (2) pritrdite na vozilo s štirimi vijaki (4) M8x16 (z lečasto glavo) in priteznim navorom 22 Nm (slika 5).
4. Okovje (5) namestite na pločevino na hrbtni strani (2) in ga pritrdite s po dvema vijakoma (6) M6x16 (z lečasto glavo) in priteznim navorom 13 Nm (slika 6).
5. To ponovite tudi z drugim okovjem.

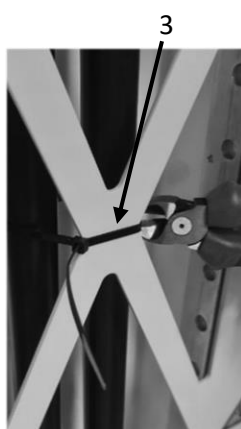
3.4 Plinska natezna vzmet in oljna zavora

SVARILO

Plinska natezna vzmet je ob dobavi prednapeta. Upoštevajte navedeni potek dela, da preprečite poškodbe in škodo.



Slika 7: položaj valjev montažo



Slika 8: vezice za kable



Slika 9: priključni element valjev



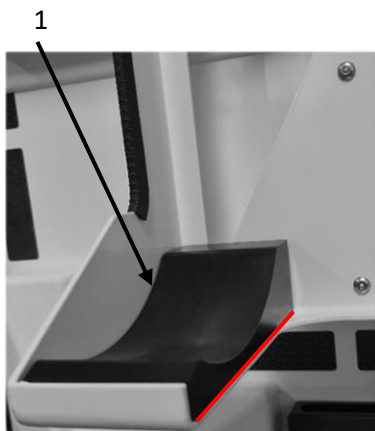
Slika 10: pripomočki za

Izvedite naslednje korake:

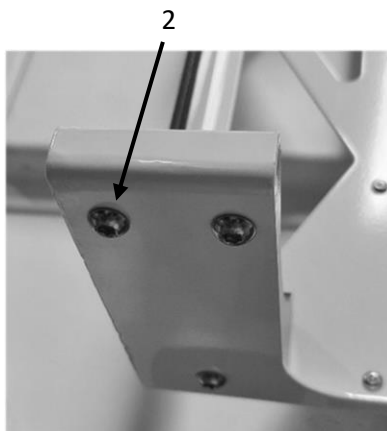
1. Pritisnite gumb za zaklepanje (1) in povlecite pločevino stola navzgor, tako da se izvrtine valjev ujemajo z izvrtinami okovja (2) (slika 7).
2. Odrežite kabelsko vezico (3) na srednji višini sistema (slika 8).
3. Povežite valje in okovja s sorniki (4) in samovarovalno matico M6 (5) s priteznim navorom 11 Nm (slika 9).
4. Ponovno pritisnite gumb za zaklepanje (1), povlecite pločevino stola za nekaj zarez navzdol in odstranite pripomočke za montažo (6) (slika 10).

3.5 Nosilec koles

Xlevator ima levi in desni nosilec za kolesa (slika 10) (1). Nosilci koles so zrcalno simetrični. Na spodnji strani nosilcev koles je en rob pravokoten, drugi pa zaobljen.



Slika 11: levi nosilec kolesa



Slika 12: vijačni spoj nosilca koles

Izvedite naslednje korake:

1. namestite levi (slika 11, 1) in desni nosilec kolesa v pločevino stola (Sl. 12).
2. Pravokotni notranji rob (slika 11), označen z rdečo, pritrdite poravnano. Nasprotni zunanji rob je zaobljen, da se prilega zvaru. Desni nosilec kolesa je zrcalna slika levega.
3. Na prve (najnižje) navoje **vseh** vijakov nanesite kapljico sredstva za varovanje navojev srednje trdnosti.
4. Pritrdite nov nosilec kolesa (1) s tremi novimi vijaki M8x12 z lečasto glavo (2) s priteznim navorom 8 Nm.

3.6 Preverjanje pravilne montaže



OPOZORILO

Uporabite naslednji kontrolni seznam, da preverite pravilnost montaže. Če ena od teh točk ne velja, je treba to popraviti.

- Vsi vijaki so bili uporabljeni in ni več vidna nobena izvrtina: štirje M8x16 (glava valja), štirje M6x16 (lečasta glava), šest M8x10 (lečasta glava)
- Vsi vijaki so poravnani in trdno priviti (med montažo uporabite navorni ključ)
- Neovirano gibanje gor in dol
- Plinska natezna vzmet je v pomoč pri dviganju
- Oljna zavora uravnava hitrost pri dviganju (uporaba brez bremena)
- Sistem je mogoče zakleniti v različnih položajih
- Trakovi so nepoškodovani in delujoči

Po strokovni montaži je Xlevator takoj pripravljen za uporabo.

4 Vzdrževanje

Vzdrževanje izvede upravljavec in njegovo osebje ob upoštevanju naslednjih navodil. Nepooblaščen popravila niso dovoljena. Določene komponente lahko zamenja upravljavec; komponente so razdeljene v dve skupini:

1. Komponente, ki jih lahko zamenjajo **uporabniki (nestrokovnjaki)** (**Navodila v ločenem dokumentu *Navodila za uporabo Xlevator***), npr. trakovi;
2. komponente, ki jih mora zamenjati **tehnik** (poglavje 4.2 *Popravilo s strani tehnikov*), npr. plinska natezna vzmet.

Upravljavec je odgovoren, da za to pooblasti ustrezno, usposobljeno in poučeno osebje.

Video o vzdrževanju Xlevatorja je na voljo na domači strani proizvajalca.

OPOZORILO

Vedno je treba uporabiti varovalo za vijake srednje trdnosti. Čas, potreben za strjevanje, je naveden v podatkih proizvajalca varoval za vijake.

OPOZORILO

Uporabljati je dovoljeno samo nadomestne dele podjetja fEX Engineering GmbH!

Uporaba drugih delov lahko povzroči nevarnost! Popravila niso dovoljena.

Za vsa dela na izdelku so odločilnega pomena navodila za uporabo. Ko boste poškodovane komponente zamenjali, lahko sistem ponovno zaženete.

Za izdelke, ki so dosegli svojo življenjsko dobo, podjetje fEX Engineering GmbH ne dobavlja rezervnih delov in ne izvaja popravil.

4.1 Vzdrževanje

Vodila je treba ob upoštevanju njihovega stanja ponovno namazati. To je med drugim odvisno od pogostosti/intenzivnosti čiščenja, ki pa ga je treba opraviti **vsaj enkrat letno** (Poglavje 8.4.5 *Ponovno mazanje vodil*).

Vizualni pregled je treba opraviti vsak teden (Navodila v dokumentu *Navodila za uporabo Xlevator*). Okvarjene komponente je treba po potrebi zamenjati.

4.2 Pregled s strani tehnikov

Spodaj navedene komponente morajo z originalnimi nadomestnimi deli zamenjati usposobljeni tehniki (videoposnetek za usposabljanje). Ti deli so na voljo po povpraševanju.

- | | |
|----------------------------------|----------------------|
| • Konektor valjev | (art.-št. fEX0140ZV) |
| • Plinska natezna vzmet (290 Nm) | (art.-št. fEX0140ZF) |
| • Oljna zavora (2,7 mm) | (art.-št. fEX0140OB) |
| • Enota z zaklepnim mehanizmom | (art.-št. fEX0140VE) |
| • Gumb za zaklepanje (rumen) | (art.-št. fEX0140KG) |
| • Gumb za zaklepanje (rdeč) | (art.-št. fEX0140KR) |


OPOZORILO

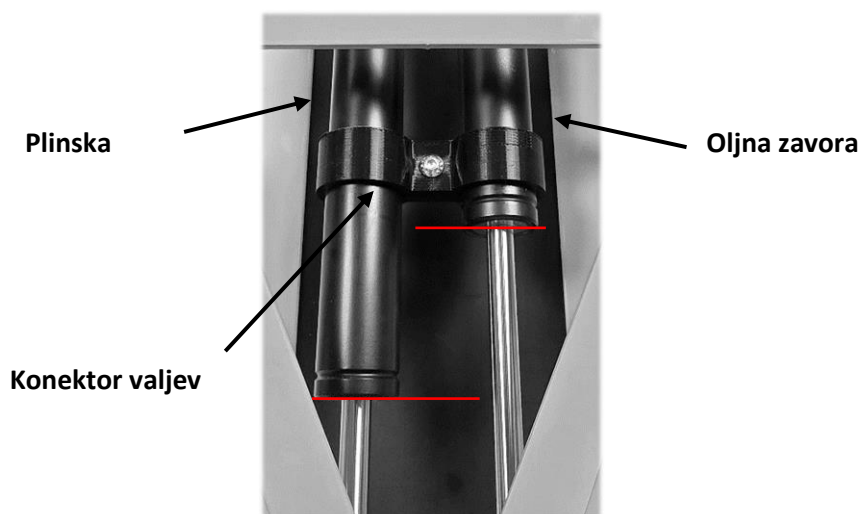
Uporabljati je dovoljeno samo nadomestne dele podjetja fEX Engineering GmbH!

Uporaba drugih delov lahko povzroči nevarnost!

4.3 Natezna vzmet, oljna zavora in konektor valjev

Zamenjavo teh sestavnih delov lahko izvajajo samo usposobljeni tehniki (videoposnetek za usposabljanje). Tako natezna vzmet kot oljna zavora morata biti z batnico vred nameščeni v smeri navzdol. Natezno vzmet in oljno zavoro lahko prepoznate po dolžini valjev. **Valj natezne vzmeti je približno 6 cm daljši od valja oljne zavore (slika 13).**

Konektor valjev je z vijakom pritrjen okoli obeh valjev in mora biti nameščen skoraj povsem na dnu.



Slika 13: identifikacija valjev

4.4 Nadomestna plinska natezna vzmet

Plinsko natezno vzmet smejo zamenjati samo usposobljeni tehniki (videoposnetek za usposabljanje).

SVARILO

Plinska natezna vzmet je ob dobavi prednapeta. Sledite navedenemu vrstnemu redu, da preprečite poškodbe in škodo.

Izvedite naslednje korake:

1. Premaknite sistem v najnižji položaj in ga zaklenite.
2. Odvijte vijak konektorja valjev (1), (slika 14) in ga povlecite navzdol, tako da bo prosto visel nad batnicami.
3. Identificirajte plinsko natezno vzmet (glejte poglavje 3.3 Natezna vzmet, oljna zavora in konektor valjev)
4. Namestite **oba** pripomočka za sestavljanje (2) (slika 15) čez batnico plinske natezne vzmeti.
5. Počakajte, da se sistem premakne kolikor je mogoče navzgor (pripomočki za montažo blokirajo zadnjo pot premikanja).
6. Odvijte matico (3) na zgornjem okovju (slika 16).
- in odstranite sornik (4).
7. Premaknite sistem za eno stopnjo navzdol in počakajte, da se zaskoči.
8. Ponovite 6. korak na spodnjem okovju.
9. Odstranite plinsko natezno vzmet od spodaj.
10. Novo natezno vzmet vstavite z batnico obrnjeno navzdol in prek batnice namestite konektor valjev.
11. Povežite valj in **spodnje** okovje s sornikom in samovarovalno matico M6 s priteznim navorom 11 Nm.
12. Pritisnite gumb za zaklepanje in povlecite pločevino stola navzgor, tako da se izvrtina valja ujema z izvrtino zgornjega okovja (slika 16).
13. Povežite plinsko natezno vzmet in **zgornje** okovje (slika 16) s sornikom (4) in samovarovalno matico M6 (3) s priteznim navorom 11 Nm.
14. Konektor valja povlecite čez oba valja (slika 14) in ga pritrdite na vijak M5x10 (lečasta glava) (1) s priteznim navorom 5 Nm.
15. Uporabite izdelek, da preverite delovanje.



Slika 14: konektor valja



Slika 15: pripomočki za montažo



Slika 16: okovje zgoraj

4.5 Menjava oljne zavore

Menjavo oljne zavore smejo opraviti samo usposobljeni tehniki (videoposnetek usposabljanja).

Izvedite naslednje korake:

1. Sistem premaknite v sredinski položaj in ga zaklenite.
2. Odvijte vijak konektorja valjev (1) (slika 17) in ga povlecite navzdol, tako da konektor valjev prosto visi nad batnicami.
3. Identificirajte plinsko natezno vzmet (glejte poglavje 8.5.1 *Vzmet, zavora in konektor*).
4. Odvijte matico (2) na zgornjem okovju (slika 18).
in odstranite sornik (3).
5. Odvijte matico na spodnjem okovju in odstranite vijak.
6. Odstranite oljno zavoro od spodaj.
7. Novo oljno zavoro namestite z batnico obrnjeno navzdol in prek batnice namestite konektor valjev.
8. Povežite valj in **spodnje** okovje s sornikom in samovarovalno matico M6 s priteznim navorom 11 Nm.
9. Oljno zavoro ročno potegnite navzgor, tako da se izvrtina valja ujema z izvrtino zgornjega okovja.
10. Povežite cilinder in **zgornje** okovje (slika 18) s sornikom (3) in samovarovalno matico (2) s priteznim navorom 11 Nm.
11. Konektor valja (slika 17) povlecite čez oba valja in ga pritrdite z vijakom M5x10 (lečasta glava) (1) s priteznim navorom 5 Nm.
16. Uporabite izdelek, da preverite delovanje.



Slika 17: konektor valjev



Slika 18: okovje zgoraj

4.6 Izmenljiva enota z zaklepnim mehanizmom

Enoto z zaklepnim mehanizmom smejo zamenjati samo usposobljeni tehniki (video usposabljanja).

 SVARILO

Pločevina stola mora biti v zgornjem položaju, ker se sistem samodejno vedno premakne navzgor. Upoštevajte navedeni potek dela, da preprečite poškodbe in škodo.

Izvedite naslednje korake:

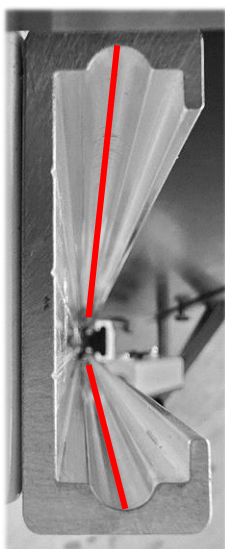
1. Sistem premaknite v sredinski položaj in ga tam zaklenite.
2. Namestite **oba** pripomočka za sestavljanje (2) (slika 15) čez batnico plinske natezne vzmeti.
3. Pritisnite gumb za zaklepanje in počakajte, da se sistem zažene, dokler so nameščeni pripomočki za sestavljanje.
4. Odstranite ročaj tako, da odvijete štiri vijake M5x12 na zadnji strani pločevine stola.
5. Roko dajte za enoto z zaklepnim mehanizmom in enoto trdno pridržite.
6. Odstranite štiri vijake z ugrezno glavo.
7. Celotno enoto z zaklepnim mehanizmom obrnite za približno 45° in jo odstranite.
8. Na priložene nove vijake z ugrezno glavo nanesite kapljico sredstva za varovanje navojev srednje trdnosti.
9. Vzemite nadomestno enoto in jo v obrnjeni legi postavite pod tipko. Tipko bo morda treba nekoliko obrniti, da se enota poravna s pločevino.
10. Enoto pritisnite v pločevino in jo obrnite nazaj (za približno 45°).
11. Namestite štiri vijake M6x16 (ugrezna glava) s priteznim navorom 10 Nm.
12. Premaknite sistem nazaj na sredinski položaj in ga tam zaklenite.
13. Odstranite dva pripomočka za montažo.
14. Nato preverite delovanje zaklepov v različnih položajih.

4.7 Ponovno mazanje tekalnih vodil

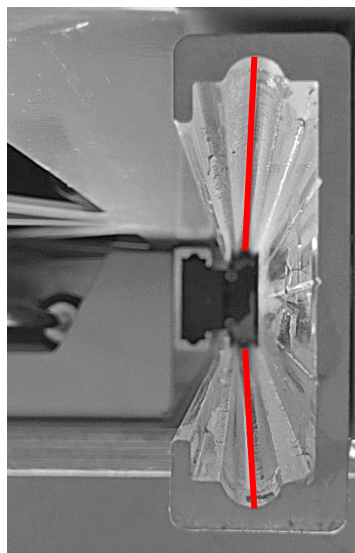
Ponovno mazanje je treba opraviti po potrebi, vendar **vsaj enkrat letno**. Ker se v vodilih lahko nahajajo tujki, jih je treba predhodno očistiti. Za ponovno mazanje tekalnih vodil je treba uporabiti mast NLGI razreda 2 ali podobno.

Izvedite naslednje korake:

1. sistem postavite v najnižji položaj;
2. vodilo očistite s suho krpo;
3. obe tekalni površini vodila namastite (slika 19 in 20);
4. opravite 2. in 3. korak za vsa štiri vodila;
5. sistem premikajte od zgoraj navzdol, da porazdelite mast;
6. odvečne masti znotraj vodil **ni potrebno** odstraniti.



Slika 19: vodilo – pločevina na hrbtni strani



Slika 20: vodilo – pločevina stola

5 Demontaža, recikliranje, odstranjevanje

5.1 Demontaža

**SVARILO**

Izdelek morate pred demontažo očistiti in razkužiti.

Demontirane in poškodovane komponente lahko imajo ostre robove.

Demontažo lahko izvede upravljavec in njegovo osebje. Upravljavec je odgovoren, da pooblasti za to usposobljeno osebo. Demontaža poteka v obratnem vrstnem redu montaže.

5.2 Recikliranje, odstranjevanje

Pri odstranjevanju vedno upoštevajte **trenutna lokalna** priporočila in/ali zakonske predpise za zaščito okolja in tveganja, povezana z recikliranjem ali odstranjevanjem pripomočkov ob koncu njihove življenjske dobe.

5.3 Odstranjevanje prek podjetja fEX Engineering GmbH

Če je treba izdelek zaradi poškodb ali drugih razlogov umakniti iz uporabe, lahko Xlevator (in vse druge izdelke podjetja fEX Engineering GmbH) pošljete na naslov podjetja za brezplačno odstranitev.

6 seznam posameznih delov

Različica	Rezervni del	Opis	Številka artikla
Xlevator – zadnja krilna vrata 1 - fEX014BD1	Trak (na strani s ključavnico)	Standardno	FEX014GS1
	Trak (na strani z jezičkom)	Standardno	FEX014GZ1
	Trak (na strani s ključavnico)	Higiena+	FEX014GS2
	Trak (na strani z jezičkom)	Higiena+	FEX014GZ2
	Držalo za trak		FEX0140GH
	Nosilec koles, levo		FEX014RAL
	Nosilec koles, desno		FEX014RAR
	Zaščita robov	dolga	FEX014KS2
	Nalepka	Nevarnost zmečkanin	FEX0140QG
	Odsevni trakovi	rdeča	FEX0140RR
	Ročaj		FEX01400G
	Gumb za zaklepanje	rumena	FEX0140KG
	Gumb za zaklepanje	rdeča	FEX0140KR
	Zaklepna enota	v celoti	FEX0140VE
	Kavelj za streme ročaja		FEX0140BH
	Drsno vodilo		FEX0140GL
	Konektor valjev		FEX0140ZV
	Plinska natezna vzmet	290 N	FEX0140ZF
	Oljna zavora	2,7 mm	FEX0140OB
	Zadrževalni blok		FEX014HB1

Tabela 5: seznam posameznih delov