

Operation manual
Navodila za uporabo

Mobile hydraulic ramps AUSBAU
Mobilne hidravlične rampe AUSBAU



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Introduction

Dear customers,

We thank you for your purchase of the AUSBAU mobile hydraulic ramps. Please read these operating instructions carefully before use. The ramps must be operated in accordance with the requirements of this manual, as well as other regulations regarding work safety requirements.

In case of any discrepancies in interpretation of operational manual terms, English version considered as primary.

We will be grateful for any advice and recommendations to make our equipment even better and more efficient!

"UAindustry", manufacturer of warehouse equipment
AUSBAU

Uvod

Spoštovane stranke,

Zahvaljujemo se vam za nakup mobilnih hidravličnih ramp AUSBAU. Pred uporabo natančno preberite ta navodila za uporabo. Rampe je treba uporabljati v skladu z zahtevami tega priročnika in drugimi predpisi glede zahtev varnosti pri delu.

V primeru kakršnih koli neskladij pri razlagi izrazov v operativnem priročniku se kot primarna šteje angleška različica.

Hvaležni bomo za vse nasvete in priporočila, da bo naša oprema še boljša in učinkovitejša!

"UAindustry", proizvajalec skladiščne opreme AUSBAU

1. Purpose of equipment

Mobile hydraulic ramps are special, auxiliary equipment that is used together with a forklift or pallet jack for loading and unloading of goods. With the AUSBAU mobile hydraulic ramp, a forklift can carry out unloading and loading operations of grouped cargoes inside a truck/wagon, driving directly into it from the ground. It helps the company significantly save its labor resources, increase efficiency, speed up cargos turnover, demonstrating an overall economic effect.

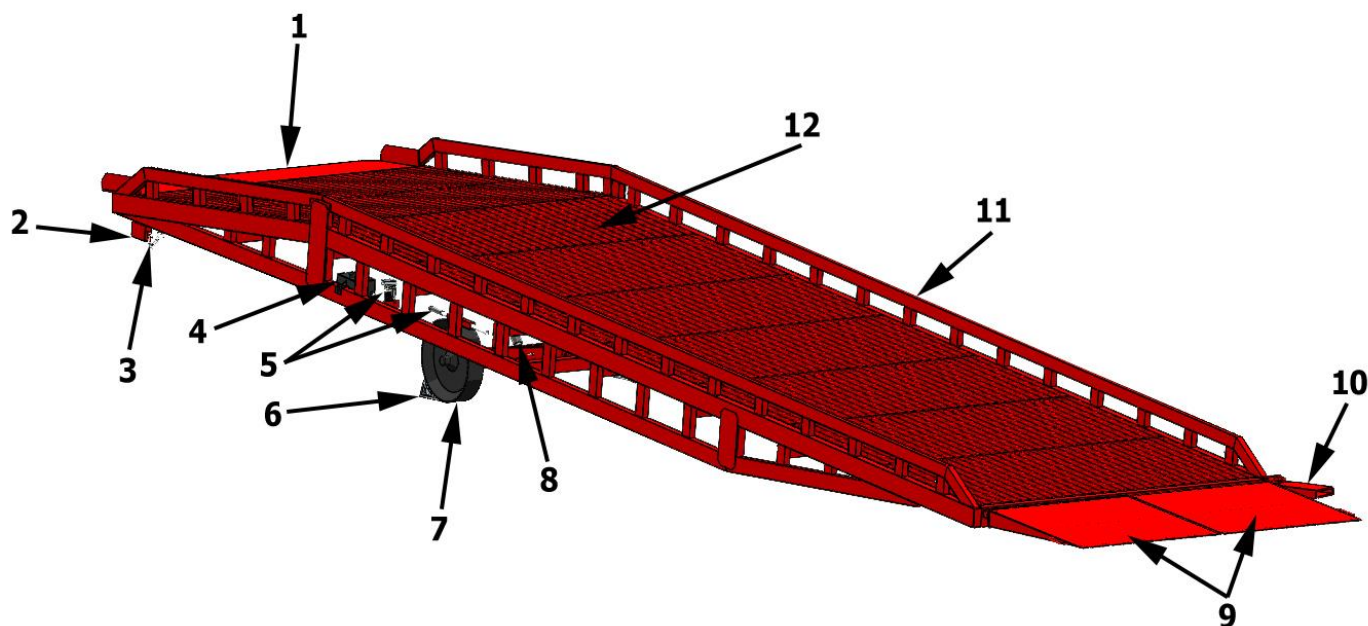
2. Specifications

See product certificate/contract.

3. Package supply

1. Mobile ramp.
2. Operation manual.
3. Quality documents.

4. General idea of the product and its design



- 1 - Strong connecting lip
- 2 - Chain fixation device
- 3 - Chain with hook
- 4 - Oil tank
- 5 - Pump with a handle
- 6 - Wheel chocks

- 7 - Wheels
- 8 - Hydraulic cylinders
- 9 - Entry bridges
- 10 - Tow pole for ramp moving
- 11 - Railings
- 12 - Riding surface

- 1 - Močan povezovalni most
- 2 - Naprava za pritrditev verige
- 3 - Veriga s kavljem
- 4 - Rezervoar za olje
- 5 - Črpalka z ročajem
- 6 - Kolesna zagozda
- 7 - Kolesa
- 8 - Hidravlični cilindri
- 9 - Zložljive rampe
- 10 - Sklopka za premikanje rampe
- 11 - Stranska ograja
- 12 - Vozišče

The loading ramp consists of two load-bearing welded sidewalls, entry bridges, connection lip, riding surface, hydraulic and wheels.

Nakladalna rampa je sestavljena iz dveh nosilnih varjenih stranskih ograj, zložljivih ramp, povezovalnega mostu, vozišča, hidravlike in koles.

The ramp entrance is made of entry bridges, coated with diamond plate reinforced by ribs installed on the back side.

The middle and upper parts of the ramp have decks that provide maximum grip of the forklift wheels on the surface and free drainage of water.

The connection lip is made of thick steel sheet.

In the central part of the product there is a hydraulic group that provides raising and lowering of the ramp. The hydraulic group consists of a hydraulic station (includes a manual pump, oil flow valve and oil tank) and two hydraulic cylinders (single-acting with return to initial position under the ramp's own weight).

To move the ramp in its lower part, between the lifting bridges of the entrance or on the side, there is a tow pole for one "fork" forklift.

In the upper horizontal part of the ramp there are chains with carabiners (hooks) for fixation of the ramp with the car body. In the middle of the ramp, on both sides there are wheel chocks for fixing the ramp wheels during loading/unloading.

* The manufacturer reserves its right to make changes in the design of the product without prior notice.

Vhod na nakladalno rampo sestavljajo zložljive rampe, prevlečene z diamantno ploščo, ojačano z rebri, nameščenimi na zadnji strani.

Srednji in zgornji del rampe imata krov, ki zagotavlja največji oprijem koles viličarja na površini in prosto odvajanje vode.

Povezovalni most je izdelan iz debele jeklene pločevine.

V osrednjem delu izdelka je hidravlična skupina, ki omogoča dvigovanje in spuščanje rampe. Hidravlična skupina je sestavljena iz hidravlične postaje (vključuje ročno črpalko, ventil za pretok olja in rezervoar za olje) in dveh hidravličnih cilindrov (enojnega delovanja s povratkom v začetni položaj pod lastno težo rampe).

Za premikanje rampe v njenem spodnjem delu, med zložljivimi rampami vhoda ali na strani, je na voljo sklopka za eno "vilico" viličarja.

V zgornjem vodoravnem delu rampe so verige s karabini (kavlji) za pritrditev rampe na karoserijo avtomobila. Na sredini rampe so na obeh straneh nameščeni kolesni zagozde za pritrditev koles rampe med natovarjanjem/raztovarjanjem.

* Proizvajalec si pridržuje pravico do sprememb v zasnovi izdelka brez predhodnega obvestila.



If you purchased a ramp with the 2SL3SW and/or EHP options, request an addition to this manual from your supplier. Do not operate the ramp without reading the required addendum.



Adjustable 2SL supporting legs, serve as a safety feature in case the truck suddenly pulls away and the chain breaks. When driving the forklift over the ramp, it is strictly forbidden to rest the ramp on the supporting legs.



Če ste kupili rampo z možnostmi 2SL3SW in/ali EHP, od dobavitelja zahtevajte dodatek k temu navodilu. Ne uporabljajte rampe, ne da bi prebrali zahtevani dodatek.



Nastavljive podporne noge 2SL služijo kot varnostni element v primeru, da se tovornjak nenadoma odpelje in se veriga pretrga. Pri vožnji viličarja po rampi je strogo prepovedano nasloniti rampo na podporne noge.

5. Description of the hydraulic station

A manual hydraulic pump transfers oil under pressure from the oil tank to the hydraulic cylinders, in this way the "body" of the ramp is raised. When the ramp is lowered (not faster than 5-8 mm/sec), the hydraulic oil flows to the tank through a distribution valve under the control of a speed limiting valve and a flow control valve.

The oil level should be no less than 1/2 and no more than 3/4 of the oil tank volume when the ramp is fully lowered. The oil level should be checked before operation and refilled if necessary.

5. Opis hidravlične postaje

Ročna hidravlična črpalka pod pritiskom prenaša olje iz rezervoarja za olje v hidravlične cilindre, s čimer se dvigne "telo" rampe. Ko se rampa spušča (ne hitreje kot 5-8 mm/s), hidravlično olje teče v rezervoar skozi razdelilni ventil pod nadzorom ventila za omejevanje hitrosti in ventila za regulacijo pretoka.

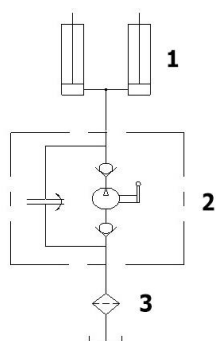
Ko je rampa popolnoma spuščena, mora biti nivo olja najmanj 1/2 in največ 3/4 prostornine rezervoarja za olje. Nivo olja je treba preveriti pred začetkom uporabe in ga po potrebi ponovno napolniti.



The hydraulic group (hydraulic cylinders, high-pressure hoses, triple adapters, connectors and pump) are consumables and are not included in the warranty list of materials to be replaced under warranty.



Hidravlična skupina (hidravlični cilindri, visokotlačne cevi, trojni adapterji, priključki in črpalka) so potrošni material in niso vključeni v garancijski seznam materiala, ki ga je treba zamenjati v okviru garancije.

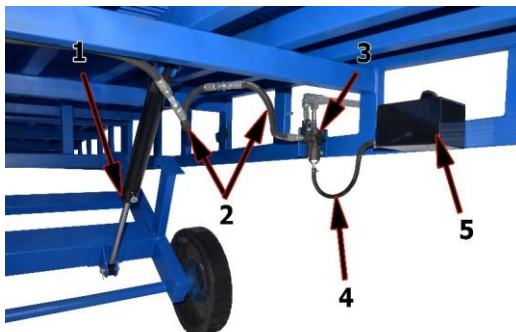


- 1 – Cylinders
- 2 – Pump
- 3 – Oil tank

- 1 – Cilindri
- 2 – Črpalka
- 3 – Rezervoar za olje

The information on the contour frame only explains the essence of the hydraulic principle.

Informacije o obrisni shemi pojasnjujejo le bistvo hidravličnega načela.



- 1 – Hydraulic cylinder
- 2 – High pressure hoses
- 3 – Shut-off valve for pumping
- 4 – Oil transfer hose
- 5 – Oil tank with necktube

- 1 – Hidravlični cilinder
- 2 – Visokotlačne cevi
- 3 – Zapiralni ventil za črpanje
- 4 – Cev za prenos olja
- 5 – Rezervoar za olje z vratno cevjo

At rest state (valve open) the oil is in the expansion tank and all hydraulic components are under no pressure. The weight of the ramp presses oil from the hydraulic cylinders into the oil tank through the high pressure hoses and the pump. When the valve is closed, the oil backflow from the hydraulic cylinders into the tank stops and the pump, driven by the operator, supplies oil under pressure to the hydraulic cylinders. When the valve is opened (gradually), the pressure in the system will decrease and the oil, under the weight of the ramp, will flow back to the distribution tank

V stanju mirovanja (ventil je odprt) je olje v ekspanzijski posodi in vse hidravlične komponente so brez tlaka. Teža rampe pritiska olje iz hidravličnih cilindrov v oljno posodo prek visokotlačnih cevi in črpalke. Ko je ventil zaprt, se povratni tok olja iz hidravličnih valjev v rezervoar ustavi in črpalka, ki jo poganja upravljaavec, pod pritiskom dovaja olje v hidravlične valje. Ko se ventil (postopoma) odpre, se tlak v sistemu zmanjša in olje se pod težo rampe po ceveh steka nazaj v razdelilno posodo. Hitrost spuščanja rampe ne sme presegati 5-8 mm/s.

through the hose. Ramp lowering speed should not exceed 5-8 mm/sec.



Do not open the valve on the pump sharply to avoid a sudden lowering, which could damage the mechanism. Pressure should be released slowly (5-8 mm/sec. is recommended).

The hydraulic system is filled with all-season oil. If it is necessary to operate in temperatures below 0 degrees Celsius, change the oil to the corresponding temperature set.

6. Transportation of the product

Transportation of the packed product can be carried out by road, rail and sea transport in accordance with the rules established for this type of transport.

Loading on transport, unloading, placing and securing on transport should be carried out by methods that ensure the safety of the package.

Loading and unloading is carried out by means of 4 strapping ropes with hooks. The hooks are placed on top of the item and hooked into the side guards so that the center of gravity falls inside the rectangle formed by the hooking points.

A can with paint goes with a ramp. It is securely packed and connected to the ramp. If there are any scratches that arise during transportation/unloading of the ramp, it is possible to paint over all defects on the ramp.

7. Storage policy

1. The loading ramp must be stored in the lowered state.

2. To make the use of the ramp long and efficient, we recommend putting the ramp under a shelter to prevent rain and rusting of the ramp.

3. The ramp must not come into contact with aggressive chemical compounds.

8. Ramp usage intensity

The product is designed to operate in a mode in which the throughput capacity of one ramp should not exceed 160 tons of cargo transported through it daily. In case of exceeding the limit of intensity of use, the manufacturer declines the responsibility to provide warranty and post-warranty service of the equipment.

9. Precautions for operating the ramp



Ventila na črpalki ne odpirajte naglo, da ne bi prišlo do nenadnega spuščanja, ki bi lahko poškodovalo mehanizem. Tlak je treba sproščati počasi (priporočljivo 5-8 mm/s).

Hidravlični sistem je napolnjen z večstopenjskim oljem. Če je treba delovati pri temperaturah pod 0 stopinj Celzija, zamenjajte olje z oljem, primernim za to temperaturno območje.

6. Prevoz izdelka

Prevoz zapakiranega proizvoda se lahko opravi po cesti, železnici in morju v skladu s pravili, določenimi za to vrsto prevoza.

Nalaganje na prevoz, razkladanje, polaganje in pritrdjevanje na prevoz je treba opraviti z metodami, ki zagotavljajo varnost paketa.

Nakladanje in razkladanje poteka s pomočjo 4 vrvi s kavljji. Kljuge se namestijo na vrh predmeta in zapičijo v stranska varovala, tako da težišče pade v pravokotnik, ki ga tvorijo kljuge.

Pločevinka z barvo gre z rampo. Je varno zapakiran in povezan z rampo. V primeru prask, ki nastanejo med transportom/razkladanjem klančine, je možno prebarvati vse pomanjkljivosti na klančini.

7. Politika skladiščenja

1. Nakladalno rampo je treba shraniti v spuščnem stanju.

2. Da bo uporaba rampe dolgotrajna in učinkovita, priporočamo, da rampo postavite pod nadstrešek, da preprečite dež in rjavenje rampe.

3. Rampa ne sme priti v stik z agresivnimi kemičnimi spojinami.

8. Intenzivnost uporabe rampe

Izdelek je zasnovan tako, da zmogljivost ene rampe ne sme presežati 160 ton tovora, ki se dnevno prepelje prek nje. V primeru prekoračitve meje intenzivnosti uporabe proizvajalec zavrača odgovornost za zagotavljanje garancijskega in pogarancijskega servisa opreme.

9. Previdnostni ukrepi za uporabo rampe

The mobile ramp can be operated by persons who are familiar with this operation manual, have studied the device and operating procedures, safety measures, maintenance, typical failures and troubleshooting procedures, storage, transportation and operation rules.

Before starting work, it is necessary to inspect the overall condition of the ramp.

The permissible load is the summary of the weights of objects simultaneously on the ramp when it is supported by another vehicle or stationary surface.

It is forbidden to use the ramp if there are any troubles.

Do not allow the maximum permissible ramp load to be increased.

Do not exceed the maximum ramp lowering speed and the maximum forklift speed.

It is forbidden to drive onto the ramp without support on the body/wagon/warehouse.



1. Never exceed the maximum load (see quality certificate for model).
2. Before starting each operation, make sure that there are no people in the working area.
3. Check tightness of connections, oil level, general condition of the ramp.
4. The ramp may only be used on level surfaces. Do not use the ramp on uneven or unstable surfaces (rock, soil, soft asphalt, etc.).
5. Make sure that connection lip rests securely on the loading surface to a depth of at least 250 mm.
6. Do not drive up the ramp unless the lip rests on the body/wagon/warehouse by 250 mm.
7. Immediately stop operating the ramp if the lip moves and eliminate the cause of the ramp movement.
8. Make sure that the ramp is connected to the truck with chains and carabiners (hooks).
9. Make sure that the wheel chocks are installed under the ramp wheels.
10. Wheels are only used to move the ramp. It is strictly forbidden to drive onto the ramp resting on wheels.
11. Do not move the ramp while lowering/lifting.
12. Do not drive into the ramp if the valve on the hydraulic pump is closed.
13. Do not stop or stall suddenly on the ramp.
14. Ensure free cylinder movement when using the ramp directly.

Mobilno rampo lahko upravljajo osebe, ki so seznanjene s tem priročnikom za uporabo, ki so preučile napravo in postopke uporabe, varnostne ukrepe, vzdrževanje, tipične okvare in postopke odpravljanja napak, pravila skladiščenja, prevoza in uporabe.

Pred začetkom del je treba preveriti splošno stanje rampe.

Dovoljena obremenitev je vsota mas predmetov, ki so hkrati na rampi, če jo podpira drugo vozilo ali nepremična površina.

Če se pojavijo kakršne koli težave, je uporaba rampe prepovedana.

Ne dovolite povečanja največje dovoljene obremenitve rampe.

Ne prekoračite največje hitrosti spuščanja rampe in največje hitrosti viličarja.

Na rampo je prepovedano zapeljati brez opore na nadgradnji/vagonu/skladišču.



1. Nikoli ne prekoračite največje obremenitve (glejte certifikat kakovosti za model).
2. Pred začetkom vsakega postopka se prepričajte, da v delovnem območju ni ljudi.
3. Preverite tesnost priključkov, nivo olja in splošno stanje rampe.
4. Klančina se lahko uporablja le na ravnih površinah. Ne uporabljajte rampe na neravnih ali nestabilnih površinah (skala, zemlja, mehak asfalt itd.).
5. Prepričajte se, da povezovalni most zanesljivo počiva na nakladalni površini v globini vsaj 250 mm.
6. Ne vozite po rampi, če se most ne naslanja na nadgradnjo/vagon/skladišče za 250 mm.
7. Če se most premakne, takoj prenehajte uporabljati rampo in odpravite vzrok premikanja rampe.
8. Prepričajte se, da je rampa s tovornjakom povezana z verigami in karabini (kavlji).
9. Prepričajte se, da so pod kolesi rampe nameščeni kolesni zagozda.
10. Kolesa se uporabljajo samo za premikanje rampe. Strogo je prepovedana vožnja na rampo, ki stoji na kolesih.
11. Med spuščanjem in dvigovanjem ne premikajte rampe.
12. Če je ventil na hidravlični črpalki zaprt, ne zapeljite na rampo.
13. Pri neposredni uporabi rampe zagotovite prosto gibanje cilindra.
14. Säkerställ fri cylinderrörelse när rampen används direkt.

15. The supporting legs on the ramp are only used for safety when the truck accidentally disconnects from the ramp. The use of the ramp standing on the legs is strictly prohibited.

10. Operating rules

Before you start operating the ramp:

1. Visually verify that the ramp is in the correct position for operation.
2. Check the oil level.
3. Raise the ramp above the floor of the vehicle (50 mm higher) by closing the valve on the pump and inflate pressure using the pump. When the desired height is reached, stop pumping pressure and the ramp will stop at the reached height.
4. Center the car body regards to the ramp, carefully back the car up, making sure that the ramp and the car body are parallel. Make sure that the ramp goes inside the loading surface of the vehicle body to a depth not less than the length of the connection lip minus 50 mm.
5. Install wheel chocks under the ramp wheels (supplied with the ramp) and under the vehicle wheels.
6. Open the valve on the pump and wait until the ramp rests completely on the car body. Make sure that the ramp is lying flat.
7. Secure the ramp chains to the vehicle body with carabiners (hooks).
8. Make sure that the pump valve is open when operating the ramp.

During loading and unloading, the ramp automatically monitors the level of the vehicle.



It is forbidden to drive the truck onto the ramp, connecting lip of which is not supported by the vehicle body.

The hydraulic system is designed for ramp lifting only.

Do not use the ramp to lift the load.

The wheel group is designed only to move the ramp without load.

Do not drive up the ramp with the pump valve closed.

The direction of travel of the forklift:

1. The forklift must move strictly over the reinforced parts of the ramp (tighter arrangement of the lower support beams under the roadway).
2. The forklift should not drive into the extreme left and right 100 mm of the ramp driveway.

15. Podporne noge na rampi se uporabljajo le za varnost, če se tovornjak po nesreči odklopi od rampe. Uporaba rampe, ki stoji na nogah, je strogo prepovedana.

10. Pravila delovanja

Preden začnete uporabljati rampo:

1. Vizualno preverite, ali je rampa v pravilnem položaju za delovanje.
2. Preverite raven olja.
3. Dvignite rampo nad tla vozila (50 mm višje) tako, da zaprete ventil na črpalki in s črpalko povečate tlak. Ko je dosežena zelena višina, prenehajte črpati tlak in rampa se bo ustavila na doseženi višini.
4. Karoserijo vozila izostrite glede na rampo in previdno vozite avto vzvratno, pri čemer pazite, da sta rampa in karoserija vzporedni. Prepričajte se, da rampa sega v notranjost nakladalne površine karoserije vozila do globine, ki ni manjša od dolžine povezovalnega mostu minus 50 mm.
5. Pod kolesa rampe (priložena rampi) in pod kolesa vozila namestite kolesne zagozde.
6. Odprite ventil na črpalki in počakajte, da se rampa popolnoma nasloni na karoserijo avtomobila. Prepričajte se, da rampa leži ravno.
7. Verige rampe pritrdite na karoserijo vozila s karabini (kavlji).
8. Prepričajte se, da je ventil črpalke med upravljanjem rampe odprt.

Med natovarjanjem in raztovarjanjem rampa samodejno nadzoruje nivo vozila.



Prepovedano je zapeljati tovornjak na rampo, katere povezovalni most ni podprt s karoserijo vozila.

Hidravlični sistem je zasnovan samo za dvigovanje na rampi.

Ne uporabljajte rampe za dvigovanje tovora.

Skupina koles je zasnovana samo za premikanje rampe brez obremenitve.

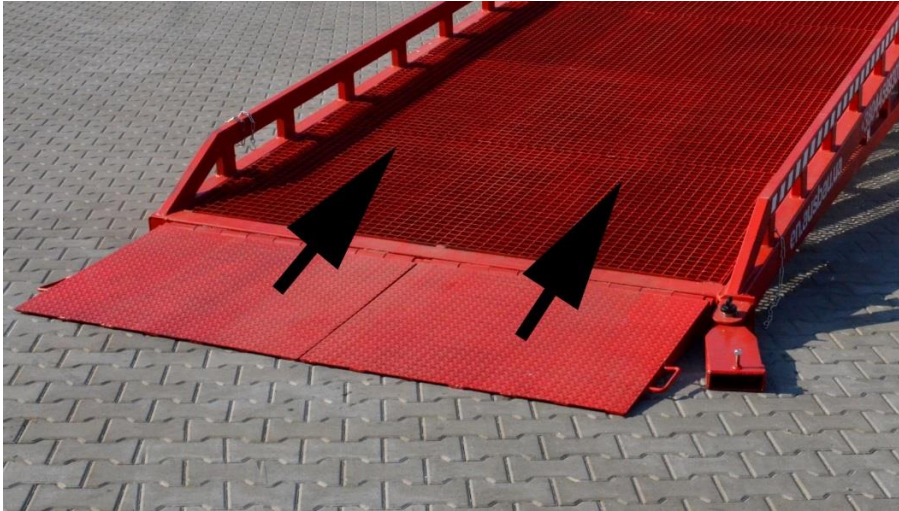
Ne vozite po rampi z zaprtim ventilom črpalke.

Smer vožnje viličarja:

1. Viličar se mora premikati strogo po ojačanih delih rampe (tesnejša namestitvev spodnjih podpornih nosilcev pod voziščem).
2. Viličar ne sme zapeljati v skrajni levi in desni del rampe na razdalji 100 mm.

3. Forklift driving diagram (arrows indicate forklift wheel lanes).

3. Shema vožnje viličarja (puščice označujejo kolesne steze viličarja).



During operation:

1. The connecting lip of the ramp remains on the loading surface of the truck (container) at a depth not less than the connection lip length minus 50 mm.

2. The hydraulic system remains free from pressure for the ramp to track the height of the supporting transport (this height varies depending on the load on the truck pendant).

3. Working with the forklift should be careful. The maximum speed of the forklift should not exceed 4 km/h. Driving faster than 4 km/h on a ramp can cause damage to the roadway, which is not covered under warranty.

4. The passing width of vehicles (outside track) that travel on the ramp must not exceed 90% of the inside width of the ramp (F), and the distance between the guardrail and the wheel of the vehicle must not be less than 5% of the inside width of the ramp (F).

Med delovanjem:

1. Povezovalni most rampe ostane na nakladalni površini tovornjaka (zabojnika) na globini, ki ni manjša od dolžine povezovalnega mostu minus 50 mm.

2. Hidravlični sistem ostane brez pritiska, da rampa sledi višini podpornega transporta (ta višina se spreminja glede na tovor na obesku tovornjaka).

3. Pri delu z viličarjem bodite previdni. Največja hitrost viličarja ne sme presegati 4 km/h. Hitrejša vožnja od 4 km/h na rampi lahko povzroči poškodbe vozišča, ki jih garancija ne krije.

4. Širina vožnje vozil (zunaj tira), ki vozijo po rampi, ne sme presegati 90 % notranje širine rampe (F), razdalja med zaščitno ograjo in kolesom vozila pa ne sme biti manjša od 5 % notranje širine rampe (F).



High-pressure hoses, oil, connectors, hydraulic cylinders, pump, expanded metal sheet (driveway), steel grating, bolts, self-tapping screws, fasteners, wheels are consumable (wearing parts) and are not replaced under warranty.



Visokotlačne cevi, olje, priključki, hidravlični cilindri, črpalka, ekspanzirana pločevina(vozišče), jeklene rešetke, vijaki, samorezni vijaki, pritrdilni elementi, kolesa so potrošni (obrabljivi deli) in se v okviru garancije ne zamenjujejo.

After completing the work:

1. Disconnect the chains.
2. Raise the ramp 50 mm above the vehicle body by closing the pump valve and pumping pressure into the system.

3. Drive the vehicle straight up to the ramp exit from the car body.

Po končanem delu:

1. Odklopite verige.
2. Dvignite rampo 50 mm nad karoserijo vozila, tako da zaprete ventil črpalke in v sistem dovajate tlak.

3. Vozite naravnost navzgor do izhoda iz rampe na karoseriji vozila.

4. Spustite rampo (5-8 mm/s) in gladko odprite ventil.

4. Lower the ramp (5-8 mm/sec), smoothly opening the valve.

5. Remove the wheel chocks under the ramp wheels.

11. Technical service

Ramp maintenance

The maintenance intervals for the ramp should be set according to the specific operating conditions.

When inspecting the ramp it is necessary to:

1. Check condition of connections, presence and condition of grease in moving parts, level of working liquid in the tank of hydraulic drive, absence of cracks.

2. Check operation of the hydraulic group - no leakage of hoses and sealing elements of hydraulic cylinders.

3. Service fluid should be replaced once in 1000 hours of operation, but not less than once a year.

4. The necessity of replacing the sealing elements of the hydraulic system is determined while making repair work.

The quality of operation and service life of the product depends on preventive maintenance and the operating conditions of the product. Timely lubrication, painting, replacement of consumables and other maintenance will ensure many years of trouble-free service.

Hydraulic system maintenance

The ramp is delivered to the customer with the working fluid - hydraulic oil.

At low operating temperatures (winter period) the operating fluid becomes very thick and must have a stable viscosity index for low temperatures.

Hydraulic oil for ramps that are used inside cold storage facilities or in climates with low temperatures (below 0 degrees Celsius), must have the properties required for the product to be used in this temperature range.

Do not mix different types of oil as an operating fluid, as they may have different rust resistance and expiration dates.

Check the hydraulic fluid level at least twice a month.

Operating fluid level: with the system filled and the ramp in the down (parking) position, the oil tank should be at least 1/2, maximum 3/4 full.

Thick Grease Points:

Thick grease points (Lithol-24 or equivalent) are shown below and should be checked at least every 6 months. All grease points should be wiped down

5. Pod kolesi rampe odstranite kolesne zagozde.

11. Vzdrževanje

Vzdrževanje rampe

Intervale vzdrževanja rampe je treba določiti glede na posebne delovne pogoje.

Pri pregledu rampe je treba:

1. Preverite stanje priključkov, prisotnost in stanje masti v gibljivih delih, raven delovne tekočine v rezervoarju hidravličnega pogona, odsotnost razpok.

2. Preverite delovanje hidravlične skupine - brez puščanja cevi in tesnilnih elementov hidravličnih cilindrov.

3. Servisno tekočino je treba zamenjati enkrat na 1000 ur delovanja, vendar ne manj kot enkrat na leto.

4. Potreba po zamenjavi tesnilnih elementov hidravličnega sistema se ugotovi med popravilom.

Kakovost delovanja in življenjska doba izdelka sta odvisni od preventivnega vzdrževanja in pogojev delovanja izdelka. Pravočasno mazanje, barvanje, zamenjava potrošnega materiala in drugo vzdrževanje bodo zagotovili dolgoletno nemoteno delovanje.

Vzdrževanje hidravličnega sistema

Stranka dobi rampo z delovno tekočino - hidravličnim oljem.

Pri nizkih delovnih temperaturah (zimsko obdobje) postane delovna tekočina zelo gosta in mora imeti stabilen indeks viskoznosti za nizke temperature.

Hidravlično olje za rampe, ki se uporabljajo v hladilnicah ali v podnebju z nizkimi temperaturami (pod 0 stopinj Celzija), mora imeti lastnosti, potrebne za uporabo izdelka v tem temperaturnem območju.

Ne mešajte različnih vrst olja kot delovne tekočine, saj imajo lahko različno odpornost proti rjavenju in različne roke uporabnosti.

Vsaj dvakrat na mesec preverite nivo hidravlične tekočine.

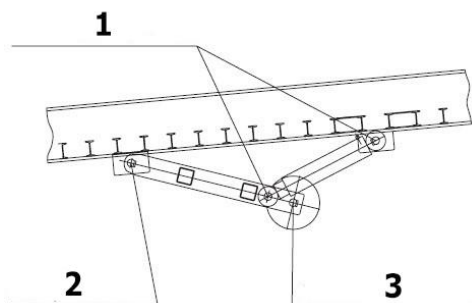
Nivo delovne tekočine: ko je sistem napolnjen in je rampa v spuščnem (parkirnem) položaju, mora biti rezervoar za olje napolnjen vsaj do 1/2, največ do 3/4.

Debele mazalne točke:

Točke debelega maziva (Lithol-24 ali enakovredno) so prikazane spodaj in jih je treba preveriti vsaj vsakih 6 mesecev. Vse mazalne točke je treba občasno obrisati s kerozinom (ali

periodically with kerosene (or equivalent) to remove dirt and fresh grease should be applied.

enakovrednim sredstvom), da se odstrani umazanija, in nanesti svežo mast.



- 1 – Hydraulic cylinder axles
- 2 – Lever axles
- 3 – Wheel Supports

- 1 – Osi s hidravličnimi cilindri
- 2 – Osi z vzvodom
- 3 – Oporniki za kolesa

12. Maintenance

Monthly maintenance

1. During inspection check the condition of connections for wear and damage, the presence and condition of lubricant in moving parts, if necessary, lubricate them. Moving parts of the ramp (bushings, axles, bearings) should be checked at least once every 3 months. All lubrication points should be periodically wiped with kerosene (or equivalent) to remove dirt and then a fresh grease should be applied (e.g. Lithol-24 or equivalent).

2. Check oil level and its quality in the tank. Oil level - with the system full and the ramp in the down position, the oil tank should be 3/4 full. If the oil is dirty, contaminated, or contains water, it must be replaced.

3. Check the operation of the hydraulic group for the presence/absence of leakage of hoses and sealing elements of hydraulic cylinders. If necessary, replace the sealing elements of the hydraulic system.

Yearly maintenance

Do a complete oil change: drain the old oil, unscrew the valve and pull out the oil filter, which must be cleaned with compressed air. Put it back in the oil tank, connect the tubes. Change the oil with new oil.

12. Popravilo

Mesečna popravila

1. Med pregledom preverite stanje priključkov glede obrabe in poškodb, prisotnost in stanje maziva v gibljivih delih ter jih po potrebi namažite. Gibljive dele rampe (puše, osi, ležaje) je treba preveriti vsaj enkrat na tri mesece. Vse mazalne točke je treba občasno obrisati s kerozinom (ali enakovrednim sredstvom), da se odstrani umazanija, nato pa nanesti svežo mazivo (npr. Lithol-24 ali enakovredno sredstvo).

2. Preverite raven in kakovost olja v rezervoarju. Nivo olja - pri polnem sistemu in spuščeni rampi mora biti rezervoar za olje poln do 3/4. Če je olje umazano, onesnaženo ali vsebuje vodo, ga je treba zamenjati.

3. Preverite delovanje hidravlične skupine glede prisotnosti/odsotnosti puščanja cevi in tesnilnih elementov hidravličnih cilindrov. Po potrebi zamenjajte tesnilne elemente hidravličnega sistema.

Letno popravilo

Izvedite popolno zamenjavo olja: izpraznite staro olje, odvijte ventil in izvlecite oljni filter, ki ga je treba očistiti s stisnjenim zrakom. Vstavite ga nazaj v rezervoar za olje in povežite cevi. Olje zamenjajte z novim.

Painting for care

1. If the ramp is outdoors (not protected from rain or other precipitation), it should be painted every 6 months, thus extending the life of the equipment.

2. If the ramp is covered with something that prevents contact with atmospheric precipitation, painting is required every year.

3. If rust is evident, clean up the damaged areas and apply paint. Check with your supplier for the type of paint.

Other maintenance

If there is damage to the metal or welds, weld them up with welds.

13. Typical faults and solutions

Name of the trouble. External signs and additional signs	Possible reason	Method of elimination
The ramp does not rise	Hydraulic pump leaks	Check the location valve, clean it if there is any dirt on the surface or inside
	There is a load on the ramp	Remove the load
	The system is vented due to a small amount of oil	Fill the tank with oil, open the plug on the pump, bleed out all the air, close the plug
	Opened valve on the pump	Close ramp lift valve
Climbing speed is too slow	Fluid leaks from hoses or cylinders	Replace hoses or cylinders
Ramp does not rise to the required height	Low oil level in the tank	Refill the oil according to the supplier's recommendations
The ramp does not go down	Descent valve is out of service	Check the location valve, clean it if there is any dirt on the surface
The wheels in the ramp are driving away	The ramp carried the load without support on transport	Not a warranty case. Replace wheel bearing and/or axle with hubs/wheels. Contact your supplier
Ramp falls down	Hydraulic pump leaks	Check the location valve, clean If there is any dirt on the surface
	Tank leakage	Weld (or close in other way otherwise close) the leaking hole

Slikanje za nego

1. Če je rampa na prostem (ni zaščitena pred dežjem ali drugimi padavinami), jo je treba vsakih šest mesecev prebarvati in tako podaljšati življenjsko dobo opreme.

2. Če je rampa prekrita z nečim, kar preprečuje stik z atmosferskimi padavinami, jo je treba barvati vsako leto.

3. Če je vidna rja, očistite poškodovana mesta in jih prebarvajte. O vrsti barve se pozanimajte pri dobavitelju.

Druga popravila

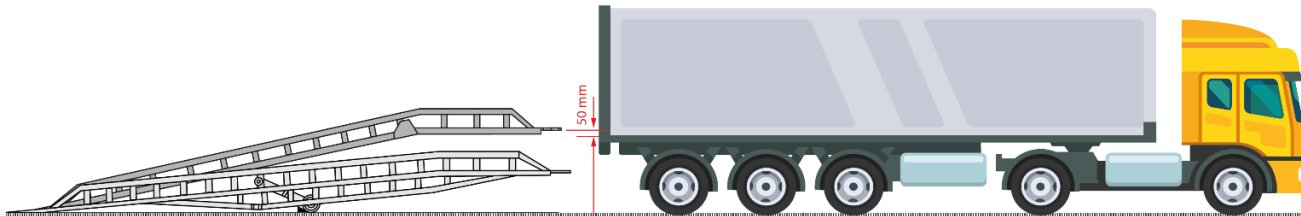
Če so na kovini ali zvarih kakršne koli poškodbe, jih zvarite z zvarnimi šivi.

13. Tipične napake in rešitve

Ime težave. Zunanji znaki in dodatni znaki	Možen razlog	Metoda odstranjevanja
Rampa se ne dvigne	Puščanje hidravlične črpalke	Preverite lokacijski ventil in ga očistite, če je na površini ali v notranjosti umazanija
	Na rampi je tovor	Odstranite tovor
	Sistem je odzračan zaradi majhne količine olja	Napolnite rezervoar z oljem, odprite čep na črpalci, izpuscite ves zrak in zaprite čep
	Odprt ventil na črpalci	Zaprite dvižni ventil rampe
Hitrost vzpenjanja je prepočasna	Uhajanje tekočine iz cevi ali jeklenk	Zamenjajte cevi ali cilindre
Rampa se ne dvigne do zahtevane višine	Nizek nivo olja v rezervoarju	Olje ponovno napolnite v skladu s priporočili dobavitelja
Rampa se ne spušča	Ventil za spuščanje ni v uporabi	Preverite lokacijski ventil in ga očistite, če je na površini umazanija
Kolesa na rampi se odpeljejo	Rampa je tovor prenašala brez podpore pri prevozu	Ne gre za garancijski primer. Zamenjajte kolesni ležaj in/ali os s pesto/kolesi. Obrnite se na svojega dobavitelja
Rampa pade	Puščanje hidravlične črpalke	Preverite lokacijski ventil, očistite Če je na površini umazanija
	Puščanje rezervoarja	Zvarite (ali kako drugače zaprite) luknjo, ki pušča

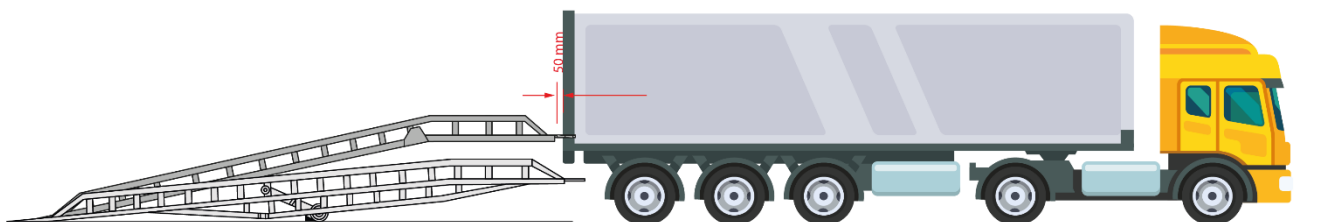
Appendix 1. Work scheme for unloading/loading

Dodatek 1. Delovna shema za razkladanje/nakladanje



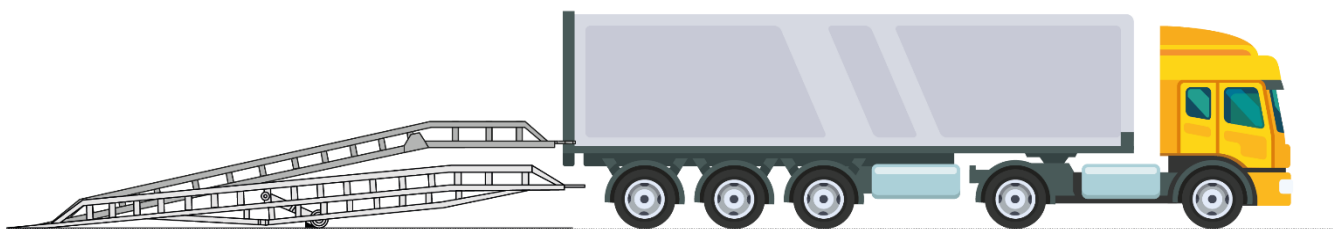
Set the height of the ramp to +50 mm from the bottom of the truck (container).

Višino rampe nastavite na +50 mm od dna tovornjaka (zabojnika).



The distance between the ramp frame and the truck should be max 50 mm.

Razdalja med okvirjem rampe in tovornjakom mora biti največ 50 mm.



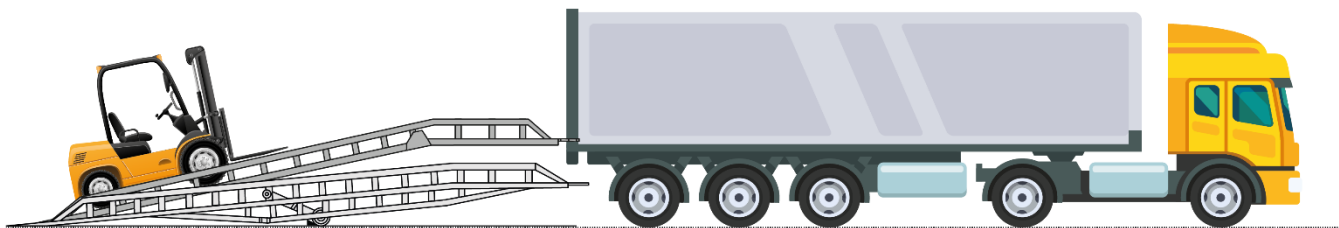
Turn the hydraulic pump valve counterclockwise so that the connecting lip rests on the bottom of the truck or container.

Obrnite ventil hidravlične črpalke v nasprotni smeri urinega kazalca, tako da priključni rob počiva na dnu tovornjaka ali zabojnika.



Connect the ramp firmly to the truck with the connecting chains.

Rampo trdno pritrdite na tovornjak s priključnimi verigami.



Please check the following before operating the forklift:

1. The connecting lip is inside the truck.

Pred uporabo viličarja preverite naslednje:

1. Povezovalni most je v notranjosti tovornjaka.
2. Položaj rampe je zavarovan s kolesnim zagozdom.

2. The ramp position is secured with a wheel chock.

3. The ramp is connected to the truck with connecting chains.

3. Rampa je s tovornjakom povezana s povezovalnimi verigami.

Ne oklevajte in pokličite našega dobavitelja ali mu pošljite e-pošto. Vedno smo vam pripravljeni pomagati:

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