

At the end quality pays

TruckBus



2-, 3- and 4-ram vehicle lifts
for special-, rail- and industrial vehicles, trucks and buses

J.A. Becker & Söhne



Going up safely

... instead of cramped into the pit



← Hydraulic JAB-commercial vehicle lifts for lifting a wide range of multi-axle trucks, from heavy forklifts up to a complete tramway.

- **safe working conditions**
- **flexible application**
- **variations for every demand**
- **tried and tested in many workshops**

*The pit belongs to the past,
the future belongs to JAB!*



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Individual quality variations

that show the way to the future

Variations

Rams

Number of lifting rams: choiseable from 2 to 4. Generally one of these lifting rams (at HVV-lifts two rams) is installed fix. The others are adjustable, but may also be fixed installations – depending on axle spacing of the vehicles to be lifted.

Lifting capacity

Lifting capacity per ram from 8.000 and 14.000 to 22.000 kg, on demand even up to 35.000 kg.

Supports

Exchangeable sliding supports are most frequently used. Whether you prefer universal supports or special customized lifting pads for specific vehicles – we solve every problem to your entire satisfaction.

Technical data

You will find an overview of the technical data in the enclosed specification sheet. This, as well as detailed product files with technical drawings, can be obtained from our sales and distribution department.

Telescopic vs. single-ram

In new buildings or where the floor conditions present no difficulty, the single-stage ram is the best and most economical solution. With a constructional depth of 1.450 mm only, the telescopic ram is the ideal version for installing into pits or in water preservation areas with high ground water levels. Preassembled JAB lifting units in self-contained foundation cassettes are ideal for retroactive installation in existing workshops or pits, where they can be integrated with no trouble.

Foundation and cover plates

In a new workshop a concrete foundation is especially suitable, whereby one can choose between a sliding cover plate (BT) and a segment cover plate (BS). For retroactive installation a steel foundation cassette is recommended. In this case both types of cover plates are available also.



Photos: 2-ram-lift
Lifting capacity 8.000 kg per lifting ram

For your safety: Hydraulics in perfection

For the application sectors where all-hydraulic vehicle lifts are involved JAB has developed the hydraulics in many decades into a near perfect system. The flange-mounted hydraulic pump – needing no pipework – is only an example for the

especially high JAB-quality standard. You too can benefit from the superior performance, extensive safety and long service life which are achieved with a minimum of maintenance.

The classic solution

Supplementary to the inspection pits which have been in use up till now, more and more utility vehicle workshops are enjoying the advantages of modern multi-ram lifts. And the extremely low ground clearance of present-day buses leaves no other option than to lift the vehicles up.

But even in the case of trucks, which are more easily accessible, a JAB lift will prove to be a real advantage by effecting perceptible rationalization and a working environment at an ergonomically adapter working height.

The two-ram-lift has become very popular because its performance is adequate for most utility vehicles. The position of one of the rams is electromotively moveable to ensure that vehicles with different wheel bases can be lifted.

Both rams have their own drive unit and can be driven synchronously or individually. The synchronisation of the rams remains unaffected by varying load distribution.

This lift is suitable for trucks, semi-trailer towing vehicles and standard buses with one front axle and up to three rear axles.



Exchangeable sliding supports allow to lift all types of vehicle of the appropriate weight category with a maximum of safety.

Additionally mechanical safety supports with automatically functioning notches are available. For this reason all JAB-lifts conform to EN 1493.

Consultation ... is indispensable

The combination of the diverse variations (rams, supports, wheelbase flexibility, types of foundations, cover plates) allows for an individual configuration for your specific application environment.

As an experienced workshop supplier it is for us a matter of course to support you in your decisions. Benefit from the wide

range of JAB-Know-how and include us in your planning as soon as possible.

Our authorized dealers and representatives who are working closely together with our engineer are the ideal contact persons to advise you in a competent way.

Benefit from the wide range of JAB-KnowHow



- suitable for low platform floor buses
- noticeably easier working conditions
- for vehicles with diverse wheelbases
- exchangeable support system



Exchangeable support system for lifting of diverse vehicle types.



The All-Rounder

The three-ram-lift manages almost every type of vehicle. Generally it is used for lifting articulated buses and complete road trains. The middle lifting ram is normally a fixed installation whereas the two other rams are moveable to allow different wheel bases.

Although design, technology and operating comfort are the same as the two-ram-lift, the system-related synchronization is supplemented by an electronic safety device which eliminates unintentional differences in height or reduces them to max. 50 mm.

The three-ram-lift manages almost everything!

To ensure that the versatility of the lift remains unrestricted, the synchronization controls can be switched off. This enables the rams to be driven individually or in pairs. Consequently, the three-ram-lift constitutes a two-ram-lift also.



All advantages of the two-ram-lift, plus:

- safe lifting of articulated buses and tractor trailers
- electronic safety control system
- also applicable as a two-ram-lift



Installation possibilities

1. Single ram

(execution BT and BS): The standard ram version is the obvious choice for new buildings where the bearing plate is included in construction planning. The installation depth plays a secondary role only, since – in most cases – inspection pits will have to be built anyway. The ground conditions are however decisive for the basic version. However, the respective ground conditions must be taken in account only.

2. Telescopic ram

(execution BT and BS): The shallow installation depth (only approx. 1.450 mm) allows to fit this version into existing pits. Lifts in this version are ideal for use in water preservation regions or where the ground water level is exceptionally high.

Telescopic ram with an optional safety bar (conforming EN 1493)



3. Telescopic rams in the foundation cassettes

(version WT and WS): The retroactive installation in existing halls can be accomplished most easily using this variation. The lift is delivered as a preassembly in integral steel cassettes and can be very easily installed in the prepared foundation.

As an option the foundation cassettes can be delivered with an acceptance certificate according to § 19 of the Federal Water Act (WHG), because JAB is a specialist supplier conforming to § 19 WHG. This version can also be installed without problems in existing pits, if they have a minimum depth of 1450 mm.

Retroactive installation? No problem!



The Handyman

The four-ram-lift allows the lifting of double articulated buses or long tractor trailers. Not only can it be used as a four-ram-lift, but it is also possible to employ it as a three- or two-ram-lift.

Whether it has two axles, if it is a tractor trailer or an articulated bus – no problem whatsoever. The electric control unit with integrated electronic synchronization always ensures ease of operation.



2 HVV four-ram-lifts, which are used as 2 two-ram-lifts.

All advantages of the two- and three-ram-lift, plus:

- safe lifting of double articulated buses and tractor trailers
- can be used as three-ram-lift also
- also usable as 2 two-ram-lifts

Technical features

of all JAB-lifts* * Typ HVZ, HVD and HVV

Piston stroke 1900 mm

Lifting capacity per ram choiseable 8 t, 14 t, 22 t or 35 t

Pistons are hard-chrome plated

High bending moment rating

Anti-twist device for the cylinders

Electric sliding drive, optional with AWBP (automatic wheel base positioning), for storing the ram positions.

Pit cover plates allow max. 3 t - single wheel drive-on pressure (optional 5 t, for version with segment plates)

The pit in the entire position adjustment range is automatically covered.

Emergency descent by way of simple access through assembly plate of hydraulic cylinder, outside the contours of the vehicle.

Easy servicing, pump units and seals are freely accessible.

Lift slide supports are externally adjustable to specific vehicles (with special tools)

Options

For all JAB-lifts a quantity of usefully additional equipment is available.

Wash-proof version for wet environments consisting of encased position adjustment drive with stainless shaft and Icosit-Poxicolor coated lifting cylinder for optimal corrosion protection.

Hot galvanized frame work, wheel pans and cover plates – particularly recommended for washing platforms.

Power supply (suspended control element see p. 15)

Safety locking device (conform EN 1493) mechanical fastening and hydraulic release.

Segment cover plates (execution BS and WS) instead of standard telescopic sliding plates.

Electronic sliding drive unit (AWBP - automatic wheel base positioning). For automatic ram positioning for vehicles with specific wheelbases

R-Position indicator with red/greed signal lamp. Shows whether all head-plates are in the bottom resting position – ideal for vehicles with small ground clearance (low-platform buses)



JAB – for rail - and tracked vehicles and industrial trucks

Going up even the heaviest load!

Whether rail-, tracked vehicles or industrial trucks ... JAB can fully show its expertise with these heavyweights and cater to their respective demands.

You can recognize the competence of experts especially in our systems for lifting and supporting of vehicles bodies of tramways, combined with lifting systems for changing the bogies.

Expertise of lift experts.

Tanks on a JAB-lift.
Lifting capacity 35 t
per ram.

Our focus is on fully hydraulic lifting systems with precise electronic synchronisation of the rams.

With our innovative engineering you realize a maximum of efficiency and work safety.

The realisation of individual solutions with reliable and maintenance friendly technology is our focus.



JAB-Innovation
also for heavy loads
lifting capacity 35 t per ram
safety locking device
electronic synchronization device



JAB-Innovation
especially precise synchronisation
tried and tested lifting technology
for entire tramways



JAB-Innovation
lifting capacity up to 15 t
1- or 2-rams
sunk flush to the ground
changeable supports
various vehicle types



A forklift on a JAB-special lift.
The lifting capacity of the illustrated type is 15 t.

**You want to get
further information?
Kindly ask us!**

JAB – drive unit, control unit and safety

Safe is safe

All commercial vehicle lifts of JAB have the following safety features:

A locking block automatically interrupts every movement when the drive mechanism is switched off or fails. Because the hydraulic pump unit is directly flanged, a burst pipe is impossible. That translates into inherent safety upon which you can rely.

During lowering the motor runs in reverse direction thus working as a brake on the

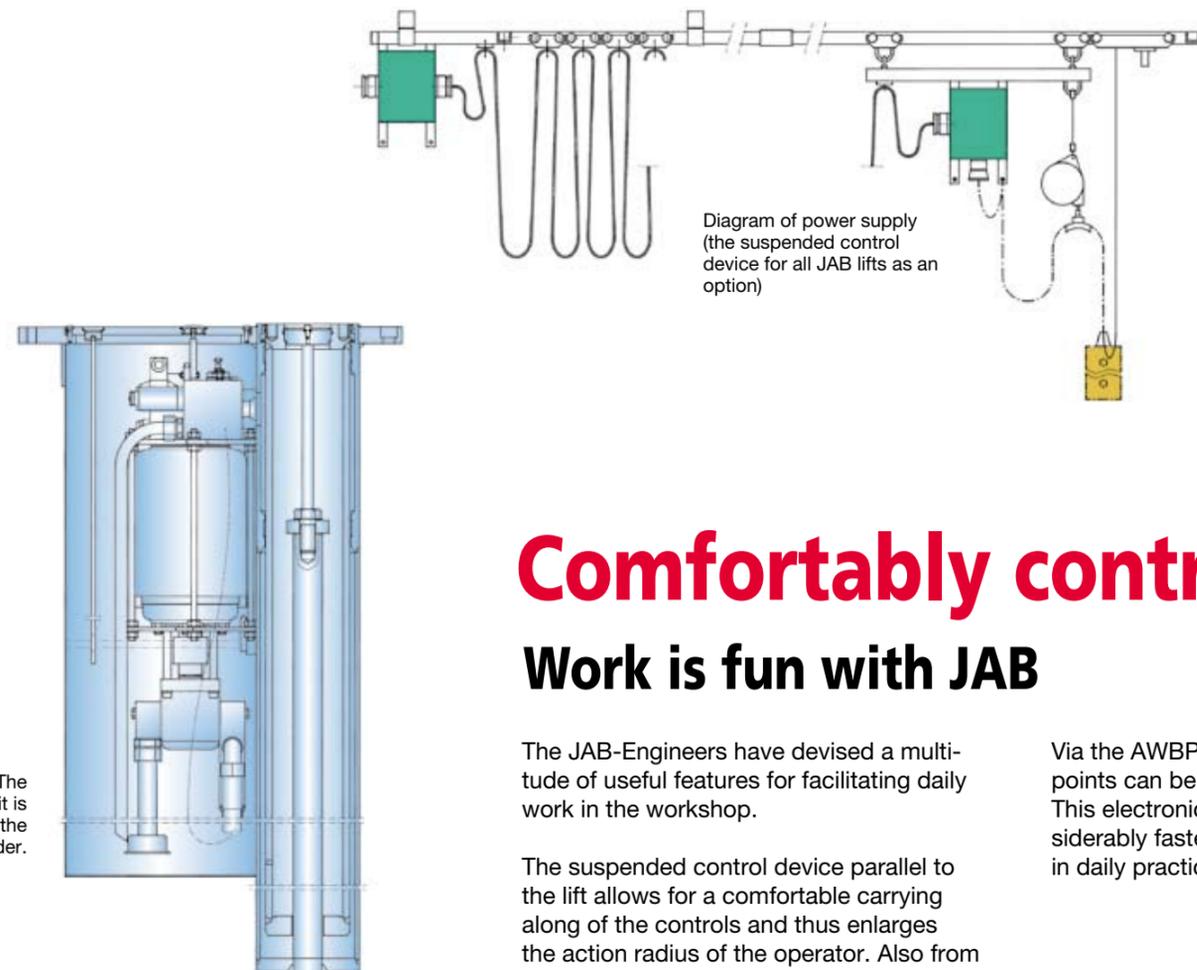
lowering movement. In case of a defect the lowering speed is additionally braked by a nozzle which reduces the flow in the hydraulic pipes. As an option we deliver the lift with mechanical safety supports (conform EN 1493).

For countries with the corresponding regulations three- and four-ram-lifts can be equipped with electronics that limit the height difference of the rams to 50 mm.

JAB: inherent safety is standard



Solved in an intelligent way: Thanks to the joint, safety bars are also available in the telescopic version.



Inherent safety: The hydraulic pump unit is directly flanged onto the cylinder.

Diagram of power supply (the suspended control device for all JAB lifts as an option)

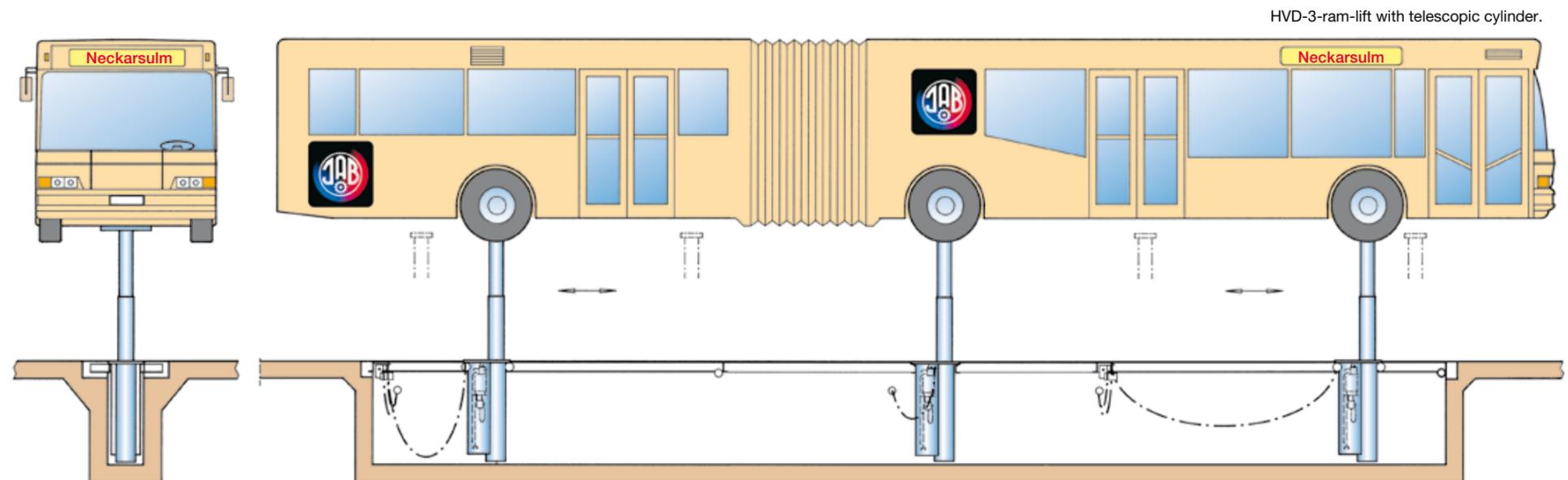


Comfortably control unit – Work is fun with JAB

The JAB-Engineers have devised a multitude of useful features for facilitating daily work in the workshop.

The suspended control device parallel to the lift allows for a comfortable carrying along of the controls and thus enlarges the action radius of the operator. Also from the point of safety this is a great plus point.

Via the AWBP-storage system the axle points can be stored in the control unit. This electronic helper makes possible a considerably faster and more fluid work process in daily practice.



HVD-3-ram-lift with telescopic cylinder.

JAB lifts

Fully-hydraulic universal and special lifts with up to 100,000 kg lifting capacity for personal vehicles, trucks, buses, and for tracked and tramway vehicles. The JAB assemblies include all elements of single-, two-, three- and four-ram underfloor lifts and two-column floor-mounted car lifts

JAB compressors

Low-, medium- and high-pressure compressors for workshops, garages, industrial facilities and the energy industry, ranging from 10 to 350 bar; special filling equipment for breathing apparatus for professional use, pressure tanks up to 200 bar, compressed air cold driers, oil and water separation



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