บบระยาว

LIGHT DUTY

WORKSHOP EQUIPMENT 09/2014





The NUSSBAUM Group has been delivering workshop equipment throughout the world for the past 40 years. We have managed this by not only having reliable partners in all aspects but by also offering them optimal

solutions for all their requirements.

The decision to purchase NUSSBAUM products means first and foremost, a safety in investment. Innovation, functionality and quality are also prerequisites to our exacting standards. We strive to achieve this every day with our 1200 employees in Germany.

Our in-house vertical integration through our German manufacturing facilities enables us to offer a blanket coverage service support net as well as spare parts procurement facilities at your disposal.

Our product pallet has evolved from many years experience and constant adaptation to the ever changing market requirements. This succeeds in not only bringing our customers closer to us but also breeds an understanding of our own engineers daily tasks.

Picture from left: Dr. Martin Huck - COO, Volker Felder - CPO, Steffen Nußbaum - CEO and Bernd Müll - CFO

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Made in Germany.



The NUSSBAUM Group	
	Steffen Nußbaum (CEO)
General Diretor	Volker Felder (CPO)
	Dr. Martin Huck (COO)
	Bernd Müll (CFO)
	Workshop Equipment
Business area	Parking & Display
	Industrial Components
	Public Transport
	Otto Nußbaum GmbH & Co. KG Kehl am Rhein
	Hydraulik Seehausen GmbH Stadt Wanzleben-Börde
	Nussbaum Parking GmbH Markranstädt near Leipzig
Location	kmf Kemptener Maschinenfabrik GmbH Kempten
Location	ATT Automotive Testing Technologies GmbH Kehl-Auenheim
	SMT Sheet Metal Technologies GmbH Kehl-Sundheim
	SCS Satellite Car Service GmbH Kehl-Sundheim
	krauth technology GmbH Eberbach near Heidelberg
	NUSSBAUM france Noisy-le-Grand, F
NUSSBAUM International	NUSSBAUM italia Bologna, IT
	NUSSBAUM russia St. Petersburg, RU
	NUSSBAUM Automotive Solutions Gastonia, USA
	NUSSBAUM Iberia, S.L. Basauri, ES



We place emphasis on developing new solutions, patented technology and pre-eminent characteristics of our products for our customers.

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Workshop Equipment 09/2014

As one of the world's largest automotive lift manufacturers, NUSSBAUM offers a broad product portfolio of workshop equipment.



Automotive Lifts for passenger car and transporter	8
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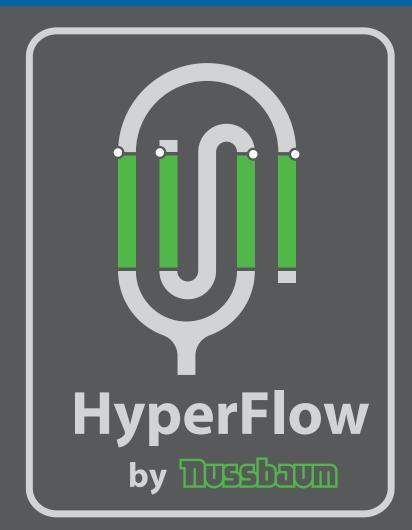
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HyperFlow Technology

- HyperFlow changes the way all future hydraulic lifts will be constructed
- HyperFlow is the basis, for even more safety, due to simpler construction with fewer parts leading to a longer life of the lift
- HyperFlow is Green, because it uses fewer resources
- A construction using HyperFlow reduces the necessary raw material by up to 30%
- HyperFlow protects not only the environment but also the purse strings, through this saving on raw material, as well as including a 5 year warranty on the functions of the lift
- Why 5 years?

Because thanks to HyperFlow, NUSSBAUM can use fewer parts on the lifts providing an almost wear free operation

• HyperFlow is exclusive only by NUSSBAUM.

DEVELOPED, PATENT PENDING AND MADE IN GERMANY.

* valid to 31.12.2014



Automotive Lifts

for light duty

UNI LIFT – Wheel alignment	
UNI LIFT 6000 & 8000	

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NEW

SMART LIFT

SPINDLE 2-POST LIFTS

SMART LIFT - THE APPROVED TECHNOLOGY

The robust contruction of SMART LIFT, as well as its fully developed technique are the results of more than 10.000 units produced in one year and more than 30 years experiences in production of lifts.



LONGLIFE-CYCLE

- low wear Nylatron-nut guarantees a quiet operation
- 5 years warranty on spindle an spindle-nut
- two motors integrated into columns
- resistant Poly-V belt a guaranteed for almost wearfree
- complete quality control at all stages

Nylatron-nut: 5 years warranty





SMART LIFT 2.30 SL – lifting capacity of 3.000kg, available in versions: STANDARD, DT and MM SMART LIFT 2.32 SL – lifting capacity of 3.200kg, available in versions: STANDARD, DT, T and MM SMART LIFT 2.35 SL – lifting capacity of 3.500kg, available in versions: STANDARD and DT

Resistant Poly-V belt

SMART LIFT 2.40 SL – with reinforced steel and extended lifitng arms for lifting vehicles up to Mercedes Sprinter with center wheelbase at the alternative pick-up points. With a lifting capacity of 4.000kg, available in versions: STANDARD and MM



OPTION: ENERGY SET

- electricity and air pressure at the working place
- 230V plug and air connection are integrated in the column

SMART LIFT - THE RIGHT SOLUTION FOR ANY WORKSHOP



SMART LIFT 2.30 SL – lift for vehicles up to VW T5 with short wheelbase and similar vehicles



MINI MAX lifting arms easy and convenient to lift lowered vehicles and for cars with pressed side skirts



Vehicles's door can be opened completely





Telescopic lifting arms and lowest lifting point

3.000kg | 3.200kg | 3.500kg | 4.000kg



FLEXIBLE SET UP HEIGHT AND WIDTH

no ground connection between columns

Flexible top connection - adjustable height of top connection without static function

ASYMMETRISC LIFTING ARM

LIFTING ARM VERSIONS

LIFTING ARMS FOR AN OPTIMUM DOOR CLEARANCE

- two times telescopic asymmetric lifting arms
- lifting wide range of vehicle
- automatic arm adjustment
- lowest pick-up point from 75mm
- short lifting arms with swivelling 180°
- Maximum of door clearance

DOUBLE TELESCOPIC LIFTING ARM (DT | UNIVERSAL)

Short lifting arm with double telescopic provides a large adjustable range and therefore possibles to lift short and width vehicles

TRANSPORTER LIFTING ARM (T)

With extension lifting arm for transporter e.g. VW T5 with long wheelbase and similar

MINI-MAX LIFTING ARM (MM)

Adapter for low clearance vehicle, as well as, for deep-drawn side skirt and off-road vehicles:

- enormous adjustable range of 75–185mm
- mmultilevel quick adjustment





Automatic arms adjustment



SMART LIFT 2.30 SL DT – short lifting arm with 2-times telescopic provides more adjustable range and simplifies lifting of shorter and wider vehicles



SMART LIFT 2.40 SL – lift for passenger cars and transporter, for universal application

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Lifts for passenger cars & transporter

SMART LIFT

SPINDLE 2-POST LIFTS

SMART LIFT 2.50 SL

With a lifting capacity of 5000kg, the perfect partner for your transporter workshop.



• two motors integrated into columns

resistant Poly-V belt

low wear Nylatron-nut quiet operation

- no floor connection
- complete quality control at all stages

• 5 years warranty on spindle an spindle-nut

• optional Energy-Set

Nylatron-nut: 5 years warranty



ACCESSORIES FOR ANY APPLICATION

- changable lifting arms provide the maximum flexibility
- NUSSBAUM provides a wide range of height adpaters universal or car's manufacturer specific

see page 26

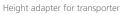
Resistant Poly-V belt





SMART LIFT 2.50 SL Symmetric lifting arm for transporter







Symmetric lifting arm for transporter



Double-jointed arms



FUNCTIONALITY & SAFETY

- simple operation
- integrated control unit in the column
- LED display at control control unit

Plug and Play installation

Height adjustable of top connection, without static function

SMART LIFT 2.50 SL

Symmetric lifting arm for transporter

- 2-times telescopic symmetric lifting arms with low pick-up points
- optimal pick-up spectrum
- automatic arms adjustment
- each lifting arm is extractable up to 1916mm

SMART LIFT 2.50 SL DG

Double-jointed arm for small vehicle (e.g. smart) up to Sprinter Unique construction with double-jointed per lifting arm for

- reaches 100% of pick-up points
- easy lifting of passenger cars through 90° of lifitng arms positioning
- required pick-up points from car's manufacture will be reached safely





SMART LIFT 2.50 SL – Symmetric lifting arm for transporter



SMART LIFT 2.50 SL – Symmetric lifting arm for transporter



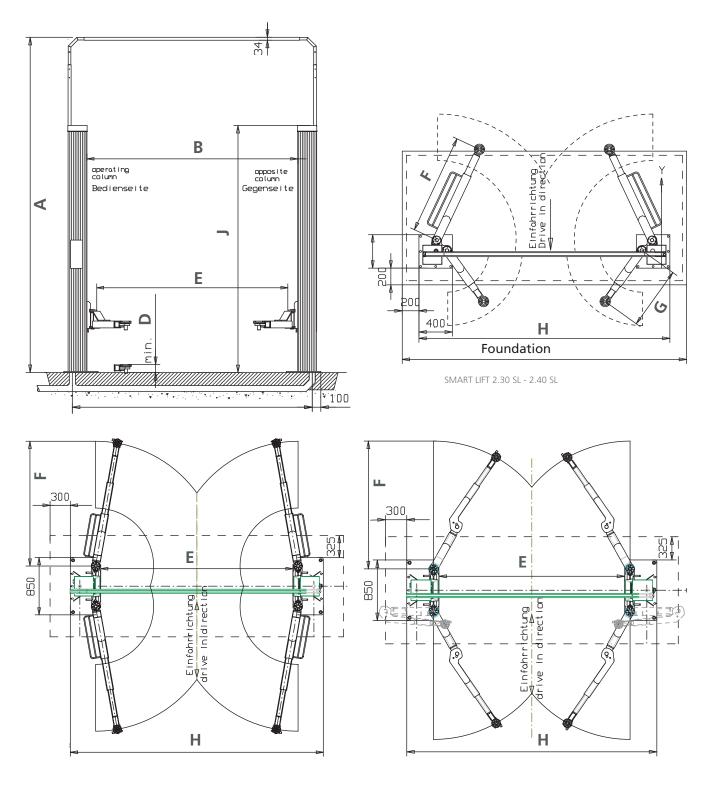
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Technical drawings for SMART LIFT



SMART LIFT 2.50 SL with standard lifting arms

Made in Germany SMART LIFT 2.50 SL with double-jointed arms

Technical data

SMART LIFT		2.30 SL	2.32 SL	2.35 SL	2.40 SL	2.50 SL	2.50 SL DG
Lifting capacity (kg)		3000	3200	3500	4000	50	00
Lifting/ lowering time approx. (sec)		40 / 40	40/40	46 / 40	46 / 40	48 /	40
Lift <mark>ing height (mm)</mark> Version: <mark>DT</mark>		1983	2010	2060 <mark>2010</mark>	2060	20	50
Lowest pick-up point (mm) Version: DT Version: MINI-MAX	D	95–140 75–185	95–140 75–185	115–190 <mark>95–140</mark>	115–190 75–185	11	5
Total height column (mm) Top connection (mm) Version: DT	J A	2887 3716–4167	2890 3720–4120	2890 3685–4170 3715–4115	2890 3685–4170	28 3620-	
Total width (mm) Version: DT Version: MINI-MAX	Н	3000 3100 3300	3050 3150 3300	3350 <mark>3230</mark>	3350 3350	3750	3500
Drive-through width (mm) Version: DT Version: MINI-MAX	E	2230 2350 2504	2240 2340 2490	2514 <mark>2400</mark>	2514 2514	2850	2600
Distance between columns (mm) Version: DT Version: MINI-MAX	В	2460 2560 2760	2470 2570 2720	2770 <mark>2650</mark>	2770 2770	3140	2890
Arm extraction long (mm) Version: DT Version: MINI-MAX	F	940–1495 1000–1480	940–1495 1000–1480	1130–1840 <mark>940–1495</mark>	1130-1840 1130-1840	860–1850	0–1789
Arm extraction short (mm) Version: T Version: DT Version: MINI-MAX	G	590–900 480–870 600–980	580–900 580–1170 480–870 600–980	570–1160	570–1160 635–1065	860–1850	0–1789
Motor (kW)		2 x 1,5	2 x 1,5	2 x 1,5	2 x 1,5	2 x 1,5	2 x 1,5
Power supply (V/Hz)		400 / 50	400 / 50	400 / 50	400 / 50	400 / 50	400 / 50

SCOPE OF DELIVERY & PROVIDED BY CUSTOMER

SMART LIFT	2.30 SL	2.32 SL	2.35 SL / 2.40 SL	2.50 SL
SCOPE OF DELIVERY				
Lift with top connection (mm)	3716-4167	3720-4120	3685-4170	3620-5100
Lifting arm		etric, telescopic lif ble turntables scrv		Symmetric, 2-times telescopic lifting arms 4 adjustable turntables scrwed in arms
Energy set			optional	
TO BE PREPARED BY CUSTOMER				
Foundation min. (mm)		200		250
Concrete quality min. (normal reinforcement)			C20/25	
Bolts (pcs)	12		16	14
Type of bolt (depends on foundation, see manual)		Hilti-V-5.8, M12		Hilti-V-5.8, M16
Power supply (V / Hz / Amp.)			400 / 50 / 16	
Time-lag fuse (mm²)			5 x 2,5	
Air supply for energy set			optional	
Unloading (fork lift)			required	

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POWER LIFT HL 2.30 K

HYDRAULIC TWO-POST LIFT

POWER LIFT 2.30 K suitable for passenger car and offroad vehicles up to 3000kg

FAST. FUNKTIONAL. POWERFUL.

FUNCTION AND SAFETY

- Combination of the single Master / Slave and HyperFlow technology
- Equipped with 1 hydraulic cylinder in each column
- Safety is guaranteed through an integrated mechanical safety ratchet



NO FLOOR CONNECTION BETWEEN COLUMNS

FAST LIFTING AND LOWERING TIMES

HANGING HYDRAULIC CYLINDER

- alomost wear-free
- require less hydraulic oil

VERSIONS

- HL 2.30 K with one-hand operation
- HL 2.30 K M with two-hand operation

POWER LIFT HL 2.30 K - HYDRAULIC AT ALL EVENTS



Automatic adjustment of lifting arm with finer gearing, manual releasing possible

Telescopic asymmetric lifting arm



NEW

Made in Germany





HyperFlow TECHNOLOGY

- The synchronization is automatically set / adjusted at all times during operation
- Automatic "bleeding" of the hydraulic system during operation

TECHNICAL DATA

POWER LIFT	HL 2.30 K / K M
Lifting capacity (kg)	3000
Lifting/ lowering time approx. (sec)	19 / 15
Lifting height (mm)	1990
Lowest lifting point (mm)	95–140
Clearance height (mm)	3967
Total height (mm)	4017
Total width (mm)	3100
Recommended installation width (mm)	3100
Drive-through width (mm)	2395
Distance between column (mm)	2630
Arm extraction long (mm)	945–1493
Arm extraction short (mm)	595-800
Power supply (V/Hz/A)	400/50/16
Motor (kW)	3

SCOPE OF DELIVERY & PROVIDED BY CUSTOMER

POWER LIFT	HL 2.30 K	HL 2.30 K M
SCOPE OF DELIVERY		
Lifting arm	asymmetric, telescopic lifting arm 4 fixed turntables screwed in the arm, with one-hand operation	asymmetric, telescopic lifting arm 4 fixed turntables screwed in the arm, with two-hand operation
Covering sheet for columns	option	
TO BE PREPARED BY CUSTON	IER	
Foundation min. (mm)	200	
Concrete quality min. (normal reinforcement)	C20/2	5
Bolts (pcs)	12	
Type of bolt (depends on foundation, see manual)	Hilti-V-5.8	, M12
Air supply for energy set	option	٦
Unloading (fork lift)	require	ed



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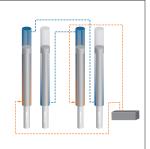
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POWER LIFT HL NT

HYDRAULIC TWO-POST LIFTS



symbolized the NT-Technology

NT TECHNOLOGY

Double hydraulic system replaces mechanical synchronization, therefore no need of safety ratchet. The lift offers more operation safety and nearly wear-free.

Double cylinders pull loads from both sides constant and safe.

FUNCTION AND SAFETY: NT TECHNOLOGY

- Crossed-cylinder master slave system provides a level lifting and lowering without the need for synchronization cables
- The load is secured at any working height without a mechanical ratchet
- The all-hydraulic system requires no electrical or pneumatic components
- No crossbeam between the columns
- Self ventilating hydraulic system
- The integrated hydraulic oil-submerged motor ensures a quiet operation

SMOOTH LIFTING AND LOWERING

without control process, thanks to stronger and constantly powers, precise movement is guaranteed.

The double master slave system enables fast lifting and lowering time, with the highest security, with the highest security with 1/3 of electricity reduction.

POWERFUL OIL- SUBMERGED MOTOR is protected in enclosed control unit.



ACCESSORIES:

- Energy set 230V power socket and air supply, integrated in the column
- Riser pipe extension
- Diverse height adapters

POWER LIFT HL NT - THE PROFESSIONAL SOLUTION FOR ANY WORKSHOP



Optimum door clearance with asymmetric lifting arm

POWER LIFT HL 2.30 NT – lift for passenger car up to transporter e.g. VW T5 with short wheelbase Automatic adjustment of lifting arm with finer gearing, manual releasing possible

MINI MAX lifting arms easy and convenient to lift lowered vehicles and for cars with pressed side skirts





HyperFlow TECHNOLOGY

- The synchronization is automatically set / adjusted at all times during operation
- Automatic "bleeding" of the hydraulic system during operation

ADJUSTABLE TOP CONNECTION

Top connection is height and width adjustable. Ideal of columns positioning and minimum space required with an optimal drive-through width

EXTENSION OF RISER PIPE

Adjustable construction height in 100mm steps with riser pipe extension from 4104mm up to 4904mm

LIFTING ARM VERSIONS

- 2-times telescopic asymmetric lifting arms for optimum lifting spectrum
- Automatic arms adjustment & low lifting point from 75mm
- Short lifting arms with swivelling 180° & vehicles's door can be opened completely

DOUBLE TELESCOPIC LIFTING ARM (DT | UNIVERSAL)

Short lifting arm with double telescopic provides a large adjustable range and therefore possibles to lift short and width vehicles

STANDARD (S)

with extension lifting arm for transporter e.g. VW T5 with long wheelbase and similar

MINI-MAX LIFTING ARM (MM)

Adapter for low clearance vehicle, as well as, for deep-drawn side skirt and off-road vehicles:

- Enormous adjustable range of 75–185mm
- Mmultilevel quick adjustment

MB & BMW LIFTING ARM only for HL 2.35 NT with short and simple telescopic lifting arm and recommended installation width





 $\label{eq:power lifting arm with 2-times telescopic arms \\ provide more adjustable range and simplifies lifting of shorter and wider vehicles \\$



POWER LIFT HL 2.40 NT – Lift for passenger cars and transporter, for universal application

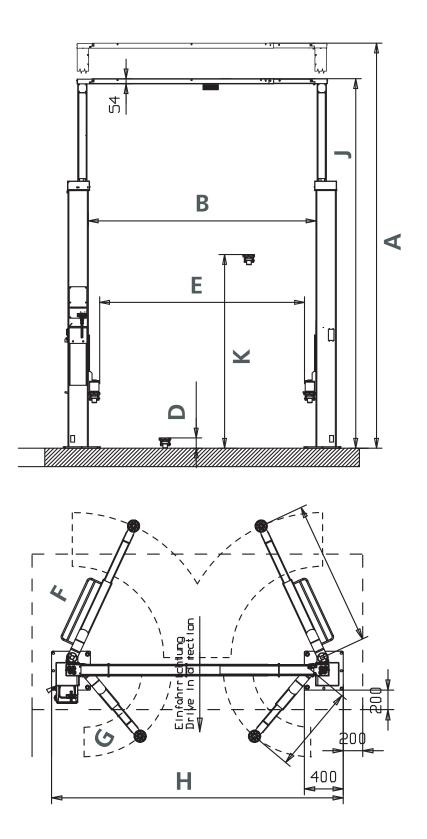








Technical drawings for POWER LIFT HL 2.30–2.50 NT



Technical data

Lifting capacity (kg) 3000 3500 4000 5000 Lifting lowering time approx. (sec) 20 / 14 26 / 14 31 / 15 Lifting height (mm) K 1995 2050 2020 Lowest lifting point (mm) P 95–140 95–140 75–185 75–185 75–185 115–190 95–140 95–140 95–140 95–140 115–190 95–140 95–140 95–140 95–140 95–140 95–140 95–140 115–190 95–140 115–190 95–140 95–140 95–140 95–140 95–140 95–140 95–140 95–140 95–140 95–140 95–140 95–140 95–140 95–140 95–140 95–140 95	POWER LIFT		HL 2.30 NT	HL 2.35 NT	HL 2.40 NT	HL 2.50 NT
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Version: DT Version: MINI-MAX 2560–2760 2760 2646 Arm extraction long (mm) Version: MINI-MAX F 940–1495 1000–1480 940–1495 1130–1840 778–1213 Arm extraction short (mm) Version: DT Version: MINI-MAX G 590–900 480–870 600–980 600–900 778–1213 Version: MINI-MAX F 590–900 480–870 570–1160 570–1160 570–1160 Version: MINI-MAX F 505–823 400/50/16 570–1160 570–1160				2400		
Version: MINI-MAX 1000–1480 Arm extraction short (mm) Version: DT G 590–900 480–870 600–900 778–1213 Version: MINI-MAX 600–980 570–1160 635–1065 480–870 Version: DG 600–980 635–1065 570–1160 Version: MINI-MAX 505–823 570–1160 570–1160 Version: MB & BMW 505–823 400/50/16 505–823	Version: DT	В	2560-2760	2646	2766	3090
Version: DT 480-870 570-1160 Version: MINI-MAX 600-980 635-1065 Version: DG 570-1160 Version: MB & BMW 505-823 Power supply (V/Hz/A) 400/50/16		F		940–1495	1130–1840	778–1213
Version: MINI-MAX 600–980 635–1065 Version: DG 570–1160 Version: MB & BMW 505–823 Power supply (V/Hz/A) 400/50/16		G		F70 11C0	600–900	778–1213
Version: Universal 570–1160 Version: MB & BMW 505–823 Power supply (V/Hz/A) 400/50/16	Version: MINI-MAX			570-1160	635-1065	
	Version: Universal			505-823	570–1160	
Motor (kW) 3	Power supply (V/Hz/A)				400/50/16	
	Motor (kW)				3	

SCOPE OF DELIVERY & PROVIDED BY CUSTOMER

POWER LIFT	HL 2.30 NT	HL 2.35 NT/2.40 NT	HL 2.35 NT MB	HL 2.50 NT
SCOPE OF DELIVERY				
Lifting arm	Asymmetric	, 4 lifting arms, telescopic screwed in the a	c, 4 adjustable turntables arms	Symmetric lifting arms
Energy set		optional	incl.	
Additional scope of delivery ONLY for Mercedes Benz approved HL 2.35 NT MB		vithout running-board H	netic basket for wheel nut leight adapter for G model op with acoustic warning s	with running-board
TO BE PREPARED BY CUSTOMER				
Foundation min. (mm)		200		
Concrete quality min. (normal reinforcement)		C20/25		
Bolts (pcs)	12	1	6	
Type of bolt (depends on foundation, see manual)		Hilti-V-5.8, M	12	Hilti-V-5.8, M16
Air supply for energy set		optional	incl.	
Unloading (fork lift)		required		

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POWER LIFT HL SST & HDL SST

HYDRAULIC TWO-POST LIFTS

Hydraulic lift with electronical synchronization ensures safety in any lifting height, without safety ratchet



POWER LIFT HL 2.50 SST (DG) POWER LIFT HL 2.60 SST (DG)

- lift for transporter with maximum power reserve
- a control unit with oil-submerged motor is supplied by SST cylinders
- self-purging system for the hydraulic circuit

LIFTING ARM FOR TRANSPORTER

- 2-time telescopic, symmetric lifting arms with low pick-up points
- symmetric lifting arm connection
- optimal pick up spectrum
- automatic arms adjustable

DOUBLE-JOINTED ARMS

Unique construction with double-jointed per lifting arm for

- reaching 100% of pick-up points
- easy lifting of passenger cars through 90° of lifting arms positioning
- required pick-up points from car's manufacture will be reached safely



SST – SAFETY STAR TECHNOLOGY

- patented safety system
- interaction with a micro-controller and proportional valves, SST guarantees perfect synchronization
- Electronical measuring system at ball bearing circulation controls the synchronization of lifting unit exactly to tenth of a millimeter

5.000KG | 6.000KG | 6.500KG | 8.000KG

POWER LIFT HDL 6500 SST DG POWER LIFT HDL 8000 SST DG

- absolute safety through Safety
 Star Technology
- two control units with oil-submerged motor is supplied by SST cylinders
- no floor connection
- double-jointed arms
- fast lifting and lowering time
- low maintenance and nearly wear-free hydraulic cylinders

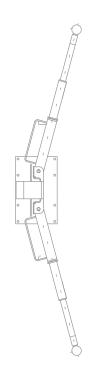


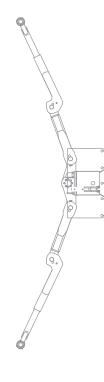
OPTION: MINI MAX ADAPTER

for HDL 6500 SST & HDL 8000 SST Adapter for low clearance vehicle, as well as, for deep-drawn side skirt and off-road vehicles:

- enormous adjustable range of 75–185mm
- multilevel quick adjustment
- operation by foot
- lifting capacity of the MINI MAX adapter is reduced to 4200kg







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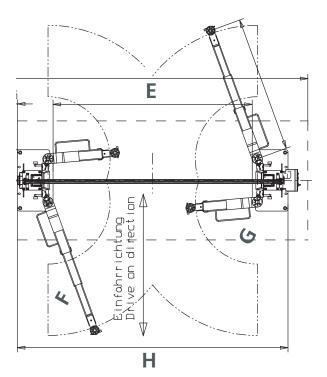
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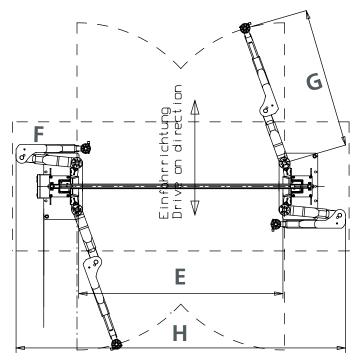
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Technical drawings for POWER LIFT HL 2.50-2.60 SST & HDL 6500-8000 SST



Drawing for POWER LIFT HL 2.50 / 2.60 SST standard lifting arms & POWER LIFT HDL 6500 / 8000 SST standard lifting arms



Drawing for POWER LIFT HL 2.50 / 2.60 SST double-jointed arms & POWER LIFT HDL 6500 / 8000 SST double-jointed arms

Technical data

POWER LIFT		HL 2.50 SST	HL 2.60 SST	HDL 6500 / 8000 SST
Lifting capacity (kg)		5000	6000	6500 / 8000
Lifting/ lowering time approx. (sec)	65 / 65	65 / 65	70 / 55
Lifting height (mm)		2000	2015	2150
Lowest lifting point (mm) Version: MINI-MAX	D	115–190 115–190	140–215 115–190	170–240
Total height column (mm) Version: DG	J	4674–5124 4640–5090	4674-5124 4640-5090	3035
Total width (mm) Version: DG	Н	3750 4210	3750 4210	3570 (4370)
Drive-through width (mm) Version: DG	Е	2760 2608	2760 2510	2376 / 2350
Column distance (mm) Version: DG	В	3060 2810	3060 2810	2766 / 2780
Arm extraction long (mm) Version: DG	F	860–1850 0–1791	931–1891 0–1890	1789 / 1834
Arm extraction short (mm) Version: DG	G	860–1850 0–1791	931–1891 0–1890	1789 / 1834
Power supply (V/Hz/A)			400/50/16	
Motor (kW)			1,5	2 x 1,5

SCOPE OF DELIVERY & PROVIDED BY CUSTOMER

POWER LIFT	HL 2.50 SST / 2.60 SST	HDL 6500 / 8000			
SCOPE OF DELIVERY					
Lifting arm	Long telescopic lifting arms or double-join- ted arms and screwed pick-up pads	symmetric, telescopic double-jointed arms, roller slided, pneumatically lockable, 4 adjustable turntables + telescopic			
Energy set	optional				
TO BE PREPARED BY CUSTOMER					
Foundation min. (mm)	2!	50			
Concrete quality min. (normal reinforcement)	C20	0/25			
Bolts (pcs)	14	20			
Type of bolt (depends on foundation, see manual)	Hilti-V-5.8, M16	Hilti-V-5.8, M16			
Air supply for energy set	in	cl.			
Unloading (fork lift)	requ	uired			

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Accessories for SMART LIFT & POWER LIFT

ACCESSORIES FOR TWO-POST LIFTS

HEIGHT ADAPTERS



250HDL28063 \cdot Fixed height adapter for decreasing of lowest lifting point of approx. 15 cm $\cdot ø$ 120 mm \cdot set = 4 units

2255L08300 \cdot Height adapter for the universal application \cdot fixed 44mm $\cdot \otimes$ 120 mm \cdot set = 4 units

232SL08840 \cdot Adapter for frame adjustable for offroad vehicles and commercial vans \cdot set = 2

232HEL48081 · Fixed height adapters for the universal appli-cation · fixed 151mm · ø 120mm · set = 4 units.



Adjustable height adapter for the universal application with ø 120 mm \cdot set = 4 units

235TTKAS08501 · **115–220 mm** 235TTKAS08809 · **231–335 mm**

235TTKAS08837 · Height adap-ters for MB 100, adjustable 150 – 255 mm, set = 4 units



Adjustable height adapters for universal application with ø 120 mm \cdot set = 4 units

232SEL48593 · **150–230 mm** 232SEL48530 · **190–240 mm** 232SEL48560 · **240–335 mm**

Height adapter with U-profile for commercial vans at vehicle's frames – the U-Profile locks the vehicle \cdot set = 4 units

232SL08850 · Adjustable range of 150–230 mm

235TTKAS08873 \cdot Height adapters for MB offroad vehicles GW 460/ 463 \cdot adjustable 160 – 275 mm \cdot set = 4 units

Height adapters for Ford Mondeo ST 220, set = 2 units

2325L08610 \cdot Height adapter for MB offroads GW 460/463 with footboard \cdot fixed 145 mm \cdot set = 4 units

2325EL48258 · Height adapter with prisms adapter, special for MB100 and similar use · fixed 145 mm · set = 4 units

Vehicle's frames – the U-Profile locks the vehicle \cdot set = 4 units

250SL08130S · Adjustable range from 184–278 mm

235TTKA508870 - Height adapters for Sprinter (NCV3) with positioning pin for front pick-up point, adjustable 230–335 mm, set = 2 units

used with...

235TTKAS08850 · Height adapters for Sprinter (NCV3) with prism for rear pick-up point, adjustable 225–330 mm, set = 2 units

FURTHER ACCESSORIES



Energy-set – optional integrated in pneumatic tool support, screwed on column

Screw tray galvanized - is inserted the control or opposite column - and into the bracket of long arm, set = 2 units

Safety adapter for A-class is mounted under the vehicle in the traverse direction and prevents tilting of the vehicle by removing of equipment assembly

Holder for height adapters

MINI-MAX - THE COMFORTABLE WORKSHOP ASSISTANT



- height adjustable turntable
- for vehicles with low clearance, as well as for deep-drawn side skirt and offroad vehicles
- quick adjustment of turntable
- enormous adjustable range
- multilevel grid quick adjustment through pedal guarantees reliable and * with MINI-MAX-Adapter comfortable positioning of lifting arms
- vehicle can be lifted higher by reduction of no-load stroke

LIFTING CAPACITY (KG)	SMART LIFT	POWER LIFT
3000	2.30 SL mm	HL 2.30 NT mm
3200	2.32 SL mm	
4000	2.40 SL mm	HL 2.40 NT mm
6500		HDL 6500 SST *
8000		HDL 8000 SST *

MINI-MAX ADAPTER

- Mini Max adapter offers convenience and safety by lifting passenger cars
- Mini Max adapter reduces the lifting capacity of HDL 6500 SST and 8000 SST to 4,200 kg



further accessories on www.nussbaum-group.de/accessory

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Lifts for passenger cars & transporter

COMBI LIFT

HYDRAULIC FOUR-POST LIFTS FOR PASSENGER CARS AND TRANSPORTERS

Robust, multifunctional, powerful



COMBI LIFT 4.40 S, 4.50 L, 4.65 XL & 4.80 H

- low construction with drive-on ramps
- transversally adjustable runway for different track width
- user friendly, lockable control unit
- Surface: powder coated, fire galvanized, OXYGEN care

FUNCTIONALITY & SAFETY - powerful, silent oil-submerged motor, integrated in runways

VERSIONS

- flat runway
- PLUS runway with wheel-free lift
- AMS runway with mounted on wheel alignment set (accessorie)
- PLUS AMS runway with wheel-free lift and wheel alignment set

COMBILIFT - SOLID. MULTIFUCTIONAL. POWERFUL.



Mechanical safety ratchet



Wheel-free lift



Flat construction with short drive-on ramp, space-saving

Control unit for 4.80 H



WHEEL-FREE LIFT (PLUS VERSION)

- Wheel-free lift, optional with adjustable length of platform
- Lifting capacity 2500 3500kg
- Available in different lifting height
- Can be combined with wheel alignment set
- Available for all models up to COMBI LIFT 4.65 XL



VARIOUS EQUIPMENT OPTIONS

- JACK 2000 | JACK 2500 air hydraulic axle jack
- LASER JACK pneumatic axle jack
- pneumatic joint play detector
- lighting along the runway



COMBI LIFT 4.50 SL AMS - for precise wheel alignment

- · Four-post lift with high precision electronical synchronization
- Four motors are perfectly integrated in the columns
- Electronical synchronization guarantees synchronized lifting and lowering
- Four low wear Nylatron-nuts, very quiet operation ensure constant and quiet running – 5 year warranty on spindle and spindle-nut
- Lift with tranversally and lengthwise traverses, axle jack 2500, MKS holder, cabling, lights, in INOX Design; integrated control panel with LC display on the front left column

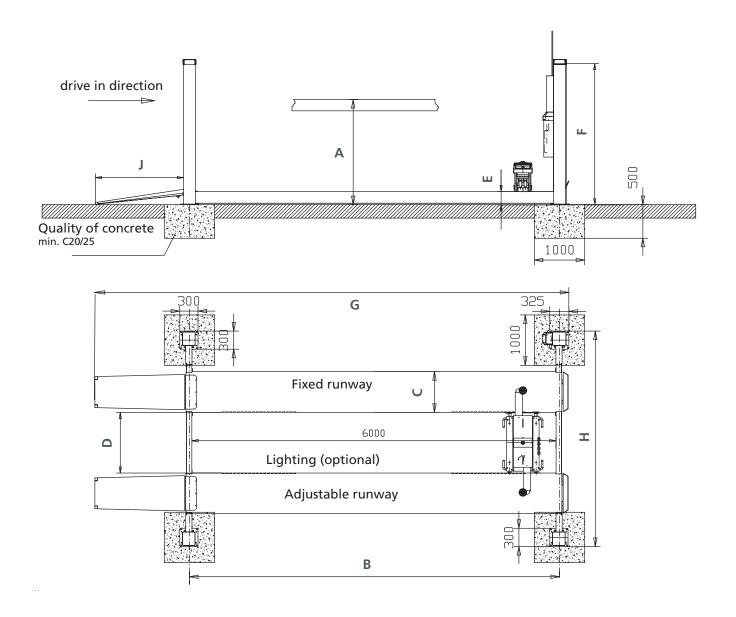
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Technical drawings for COMBI LIFT



Technical data

		4.40 S	4.50 L	4.50 SL AMS*	4.65 XL	4.80 H
Lifting capacity (kg)		4500	5000	5000	6500	8000
Lifting capacity WFH (kg) version: Plus & Plus AMS		3000	3500	-	3500	-
Lifting capacity JACK (kg)		2000	2500	2500	2500	5000
Lifting/ lowering time approx. (sec)		40/35	35 / 35	43 / 43	41 / 36	45/30
Lifting/ lowering time WFL (sec) version: Plus & Plus AMS		15 / 5	12 / 8	-	12 / 8	-
Lifting height (mm)	А	1976	1935	1890	1980	1800
Lifting height AMS (mm) version: AMS & Plus AMS		2008	2030	-	2030	-
Lifting height WFL (mm) version: Plus & Plus AMS		525	440	-	440	-
Runway length (mm) Usable runway length (mm)	В	4830 4600	5540	5500	5540	6000
Runway width (mm)	С	500	670	586	670	670
Distance between columns (mm)	D	834–984	830-930	894	830-930	
Platform length WFL (mm) version: Plus & Plus AMS		1530–1900	1550–1900	-	1550-1900	-
Drive-on height (mm)	Е	160	190	245	190	217
Drive-on height AMS (mm) version: Plus & Plus AMS		210	240	-	240	-
Drive-on height AMS (mm) version: Plus & Plus AMS		50	68	-	68	-
Drive-on height WFL (mm) version: Plus & Plus AMS	J	1000	1250	1543 (1097) **	1250	1250
Total height column (mm)	F	2162	2320	2886 (4425)***	2320	2328
Total length (mm)	G	5950	6965	6775	6965	7570
Total width (mm)	Н	3260	3540	3515	3540	3550
Motor (kW)		3,0	3,0	4 x 1,5	3,0	3,0
Power supply (V/Hz)		400 / 50	400 / 50	400 / 50	400 / 50	400 / 50

SCOPE OF DELIVERY & PROVIDED BY CUSTOMER

COMBI LIFT	4.40 S	4.50 L	4.50 SL AMS*	4.65 XL	4.80 H
SCOPE OF DELIVERY					
	Lift with adjusta bars for wheel		Lift with lengthwise and traversally top connections, incl. rear sliding plates and flat plates for turntables	Lift with ad- justable locking bars for wheel alignment	Lift with adjust- able locking bars
Wheel-free lift	option	al	-	optional	-
TO BE PREPARED BY CUSTOMER					
Foundation min. (mm)	160		250	160	180
Concrete quality min. (normal reinforcement)			min. C20/25		
Bolts (pcs)	16		16	1	16
Type of bolt (depends on foundation, see manual)			Hilti-V-5.8, M10		
Hydraulic oil HLP ISO 32 (liters)	10		10	10	17
Power supply (V / Hz / Amp.)			400 / 50 / 16		
Time-lag fuse (mm ²)			5 x 2,5		
Unloading (fork lift)			required		

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UNI LIFT 3200 NT

HYDRAULIC SCISSOR LIFT

Easy, safe and fast lifting of small and middle class, up to SUV vehicles



FUNCTIONALITY & SAFETY - NT TECHNOLOGY

- redundant hydraulic system with two independent hydraulic circuits
- powerful, quiet and long lasting oil-submerged motor

UNI LIFT 3200 NT

- no need of safety ratchet
- Robust and flat construction with short access ramps, also for low clearance
- compact and space-saving design
- easy to install, only for above-ground installation
- powerful hydraulic unit provides fast lifting and lowering times
- can be used for wheel alignment with certian requirements

VERSIONS

- PLUS runway with wheel-free lift
- PLUS AMS runway with wheel-free lift with wheel alignment set

UNI LIFT 3200 - INVESTMENT IN YOUR SAFETY!





Adjustable wheel-free lift



Easy to install - above-ground installation



INCLUDED WHEEL-FREE LIFT

- wheel-free lift with adjustable lifting platform
- lifting capacity 2500 kg
- can be combined with wheel alignment set

VARIOUS EQUIPMENT OPTIONS

- LASER JACK pneumatic axle jack
- lighting along the runways



HyperFlow TECHNOLOGY

- The synchronization is automatically set / adjusted at all times during operation
- Automatic "bleeding" of the hydraulic system during operation



4-tube lighting, integrated in the runways





Long drive-on ramps

Runways with galvanized covering

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Lifts for passenger cars & transporter

UNI LIFT NT

Hydraulic scissor lift with redundant hydraulic system with two independent hydraulic circuits.



FUNCTIONALITY & SAFETY - NT TECHNOLOGY

- redundant hydraulic system with two independent hydraulic circuits
- powerful, quiet and long lasting oil-submerged motor

UNI LIFT 3500 & 5000 NT

- very compact and low construction with short access ramps, also for low clearance vehicle
- compact and space-saving design
- no fixed connection between the runways
- no complexity of installation work
- fast lifting and lowering times
- above-ground or in-ground installation

VERSIONS

- PLUS runway with wheel-free lift
- PLUS AMS runway with wheel-free lift with wheel alignment set

UNI LIFT NT - THE PROFESSIONAL SOLUTION FOR ANY WORKSHOP



UNI LIFT 3500 & 5000 NT



UNI LIFT 3500 & 5000 NT PLUS AMS with axel JACK, above-ground installation



UNI LIFT 3500 & 5000 NT PLUS, INOX-Design, in-ground installation

Made in Germany 3.500KG | 5.000KG

WHEEL-FREE LIFT (PLUS VERSION)

- wheel-free lift, optional with adjustable length of platform
- lifting capacity 3500kg
- available in different lifting height
- can be combined with wheel alignment set

VARIOUS EQUIPMENT OPTIONS

- LASER JACK pneumatic axle jack
- lighting alongs the runways





- Pneumatic joint play detector
- Runways length: 4500mm up to 5000mm, depends on the model of UNI LIFT runways extension of 200mm possible

SURFACE TREATMENTS:

Powder coated, fire galvanized, INOX Design, OXYGEN care



The new profil for runway



Rear sliding plate



Wheel-free lift with adjustable platform

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UNI LIFT – Achsvermessung Pro

HYDRAULIC SCISSOR LIFT FOR WHEEL ALIGNMENT

The high requirements for an accurate wheel alignment is also a challenge for the alignment lift. The UNI LIFT with its unique technology is the answer to these demands.



- for wheel alignment of modern vehicles: accuracy ± 0,5 mm right / left ± 1 mm front / rear or diagonal
- precise wheel alignment and permanent repeatable measuring data
- very compact and low construction with short access ramps, ideal also for low clearance vehicles
- no fixed connection between the runways



UNI LIFT 5500 CLT QUATTRO PLUS

- wear-free kinematic, without deflection lever
- adjustable wheel-free lift for wide range of vehicle
- runway length: 5200 mm

FUNCTIONALITY & SAFETY

- 4 cylinders, provide permanently security in any lifting height through patented safety system SST
- Electronic controlled synchronization through proportional valve technique

UNI LIFT 4000 AMS

- adjustable safety ratchet system
- permanently reproducible measuring data
- runway length:
 4400 mm and 4700mm

FUNCTIONALITY & SAFETY

Hydraulic synchronization through master/ slave system

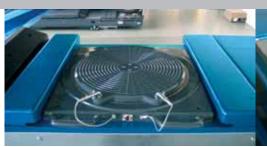
UNI LIFT - HYDRAULIC SCISSOR LIFT FOR WHEEL ALIGNMENT



Wheel-free lift



Extented drive-on ramps



Turntable with flat plates on one level

Made in Germany

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UNI LIFT – Test Pro

HYDRAULIC SCISSOR LIFT FOR FAST INSPECTION

The specialists for fast and efficient inspection processes.

UNI LIFT 4000 NT QUATTRO & UNI LIFT 5000 NT QUATTRO

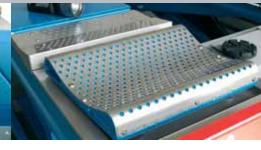
- with integrated lengthwise adjustable wheel-free lift
- pneumatic play detector and hand-lamp, cable or remote control
- a silent, powerful control unit is integrated into a canister foundation between the runways
- runway lengths: 4500 mm (UNI LIFT 4000 NT QUATTRO) or 5000 mm (UNI LIFT 5000 NT QUATTRO)
- the lift is intended for in-ground installation – optional with accessible working platform for canister foundation.
- vertical roll-off protector integrated in runways
- optional: floor compensation for axle jack



FUNCTIONALITY & SAFETY

Redundant hydraulic system with two independent hydraulic circuits ensures synchronization and security.

UNI LIFT - HYDRAULIC SCISSOR LIFTS FOR TRANSPORTER AND SMALL TRUCK



pneumatic joint play detector



Axle jack LASER JACK





Lifts for passenger cars & transporter

UNI LIFT 6000 & 8000

HYDRAULIC SCISSOR LIFTS FOR TRANSPORTER AND LIGHT TRUCKS



UNI LIFT 6000 & 8000

- space-saving, hydraulic scissor lift with lifting capacity of 6.000 kg and 8.000 kg
- equipped with flat runways, ideal to lift transporters up to light truck
- no fixed connection between the scissors
- low construction height allows an easy drive-on without long drive-on ramps
- possible to install above-ground or in-ground

FUNCTIONALITY AND SAFETY

- approved master/ slave system guarantees the synchronization of both scissors units
- mechanical latches serve as security device
- high performance oil-submerged power unit ensures a quiet operation and short lifting and lowering times

OPTIONS AND ACCESSORIES:

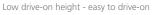
- runway length: 5500 mm (standard)
- fully galvanized lift including galvanized runways
- lighting with 4 flourescent lamps, integrated in the runways
- middle point lifter
- JACK 2000 air hydraulic axle jack
- JACK 2500 air hydraulic axle jack (for UNI LIFT 8000)
- extention of hydraulic hose

UNI LIFT 6000 & 8000 - HYDRAULIC SCISSOR LIFTS FOR TRANSPORTER AND LIGHT TRUCK



Compact construction height







No fixed connection between the scissors

Made in Germany



Accessories for COMBI LIFT & UNI LIFT

ACCESSORIES FOR FOUR-POST LIFT AND SCISSOR LIFT

JACK 2000 · JACK 2500

- air hydraulic axle jack
- universal lifting at outer pick-up points without spring relieving, or in the middle
- movable along the runways
- extendable lifting arms
- with mechanical safety ratchets in 2 heights
- min. air pressure 6 bar

LASER JACK

- pneumatic axle jack
- lift vehicle at outer pick-up points of axis
- movable along the runways
- extendable lifting arms
- min. air pressure 6 bar

JACK	2000	2500	LASER JACK
Lifting capacity (kg)	2000	2500	2000
Lifting height (mm)	370	270	270
Lifting time (sec.)	35	35	20
Lowering time (sec.)	7	7	15
Arm extraction (mm)	800–1640	810-1760	690–1495
Motor (kW)	-	_	1,5
Power supply (V/Hz)	-	_	400 / 50

further accessories on www.nussbaum-group.de/accessories

JOINT PLAY DETECTOR

- pneumatic
- installed at the end of runways
- one-hand-operation by halogen lamp with integrated push button, cable connected or radio control (optional)





Example picture: installation cassette Optional with park position for axle jack



Flat plates



Vertical roll-off protectors for in-ground installation

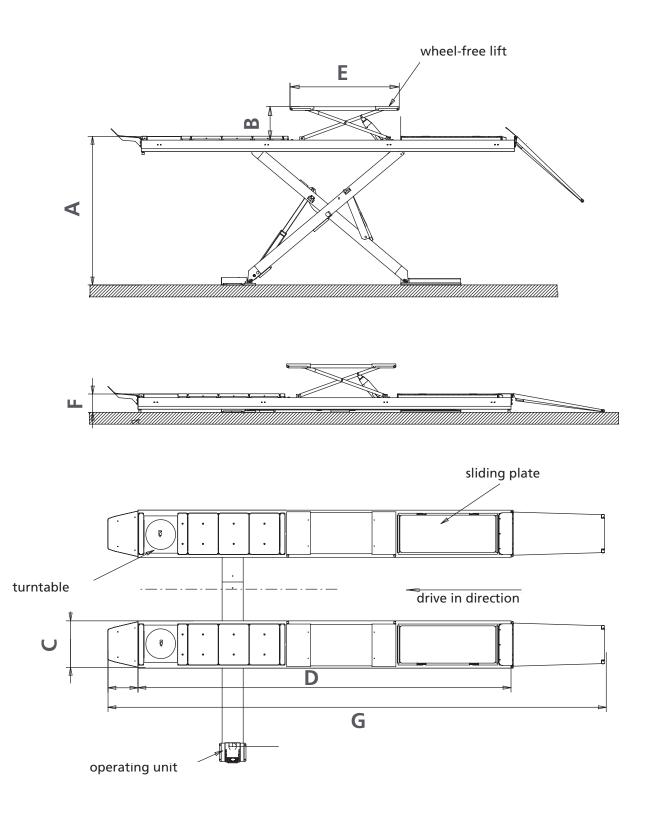


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Technical drawings for UNI LIFT



Technical data

UNI LIFT		3200 NT	3500 NT	5000 NT	4000 AMS PRC	4000 NT QUATTRO	5000 NT QUATTRC	5500 CLT QUATTRO	6000	8000
Lifting capacity (kg) version: PLUS PLUS AMS		3200 3200	4000 3500	5000 5000		000	5000	5500	6000	8000
Lifting capacity wheel-free lift (kg) *		2500	35	00	_		3500		_	_
Lifting/ lowering time approx. (sec.)		31/23	35 / 29	31 / 19	25/30	26/26	27 / 19	40/45	40 /	40
Lifting height (mm)	А	1851	19	20	1940	20	90	2100	19	27
Lifting height WFL (kg) version: PLUS version: PLUS	В	458 408	580 530	580 530	-	500	532	400	_	-
Runway width (mm)	С	500	6	35	620	6	10	620	78	38
Runway length (mm)	D	4200	4500 4700	5000	4200 4400 4700	4500	5000	5200	55	00
Platform length wheel-free lift (mm)	Е	1450-1780	1485	-1945	_	1471-2147	1459–1937	71450–1900	_	_
Drive-on height runway (mm) Drive-on height wheel-free lift (mm) Drive-on height AMS (mm)	F	220 +50 +18	195 +50 +18	195 +50 +18	220	220	225	225	21	15
Total length above-ground (mm)	G	5080	6155 6355	6655	5775 5975 6275	4610	5122	6910	71	60
Total width (mm)		1900–1950	2120	2170	2290	2120	2080	2060	23	40
Motor (kW)			3	,0		2 x	3,0		3,0	
Power supply (V/Hz)					4	100/50				

* for version: PLUS | PLUS AMS ** AMS = mounted-on wheel alignment set

TO BE PREPARED BY CUSTOMER & SCOPE OF DELIVERY

UNI LIFT	3500 NT 5000 NT	4000 AMS PRO	4000 NT QUATTRO	5000 NT QUATTRO	5500 CLT QUATTRO	6000	8000
SCOPE OF DELIVERY							
Lift	with hydraulic unit, p	positioned fr	ont left in driv	ve-on directio	on, length of	hydraulic hose	s: 1 m
Readjustable wheel-free lift	optional	-		incl.		-	
Pneumatically centered rear sli- ding plates and front recesses for turntables	optional	in	cl.	-	incl.	-	
Joint play dectector	optional	_	ind	cl.	_	-	
Lightning	optional		ind	cl.		optio	nal
Axle-Jack	optional	incl.			optional		
MKS-system	-	incl.			_		
Above-ground version	2 drive-on ramps, length approx. 1250 mm, 2 roll off protectors	2 drive-on ramps, 2 roll off protectors	-	-	2 drive-on ramps, 2 roll off protectors	2 drive-on rar 1140mm lon mounted + 2 protectors at front passage	ig on floor end roll of runways, 2
In-ground version	4 in-ground ramps	_	4 vertical ad off pro		-	4 in-groun	nd ramps
	1 set = 4 units of polymer pads 100 x 150 x 340 mm	-		units of poly x 150 x 340		-	

TO BE PREPARED BY CUSTO Bolt (pcs)	MER 12	20	16	12
Hydraulic oil (liter)	approx. 13 approx. 14	approx. 10 a	pprox. 16 approx. 42 approx. 40	approx. 10
Concrete quality min. C20/25 Time-lag fuse 5 x 2,5 mm ² p			scribed in manual) Hilti-V-5.8, M12 HLI oading (fork lift) required	P ISO 32

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Lifts for passenger cars & transporter

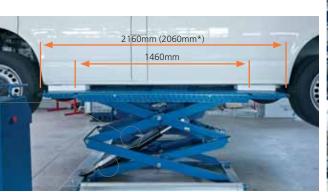
JUMBO LIFT

HYDRAULIC DOUBLE-SCISSOR LIFTS

LIFTING OF VITO, VIVARO UP TO VW T5 WITH SHORT WHEEL BASE

Follow the trend for workshops – lifting heavy vehicles such as SUVs, 4-wheel vehicles up to VW T5 with short wheel base and comparable.





VW UP

SAFE AND FLEXIBLE PLATFORM

easy to extend through lengthwise adjustable lifting platform for picking up a wide range of vehicles (*JUMBO LIFT NT 3200)



MAXIMUM LIFTING HEIGHT

effective lifting stroke of 2000 mm – enough space under the vehicle, also for in-ground installation

FREE ACCESS between the scissors, there is no mechanical connection between platforms



JUMBO LIFT - THE RIGHT SOLUTION FOR ANY WORKSHOP





JUMBO LIFT NT 3000 – For vehicles up to VW T4 with short wheel base and similar vehicles . Optional in-ground and above-ground installation



HyperFlow TECHNOLOGY

- the synchronization is automatically set / adjusted at all times during operation
- automatic "bleeding" of the hydraulic system during operation

FLAT CONSTRUCTION

low construction height possibles an aboveground installation and driving-on, also for low clearance vehicles

LONG-LIFE CYCLE & STABLE

- lubricating nipples at the bolts provide an easy maintenance and secure the long-life cycle
- high quality steel construction ensures directional stability

NT TECHNOLOGY = PERFECT & SMOOTH RUNNING POWERFUL, SAFE, STEADY

the redundant fully hydraulic system guarantees maximum operating safety through using two independent hydraulic circuits

LONG-LASTING, THANKS TO FULLY HYDRAULIC SYSTEM

- no need of safety ratchet
- no electrical and pneumatic components at the lift







Special color extra charge



JUMBO LIFT NT 3500 – lifting from VW Up up to VW T5 with short wheelbase problem-free



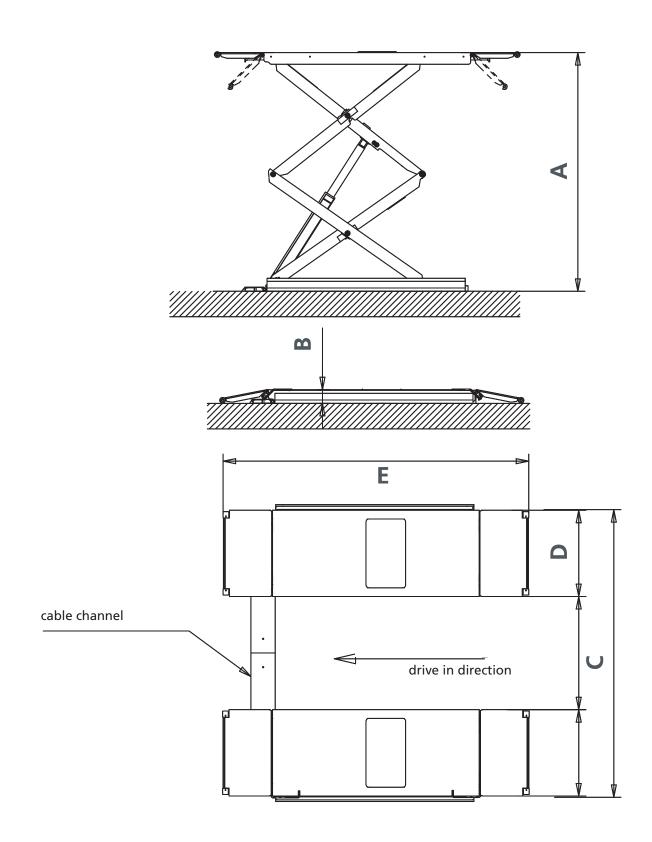
JUMBO LIFT NT 4000 – lifting vehicle from VW T5 with short wheelbase and similar vehicles | In-ground installation

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Technical drawings for JUMBO LIFT



Technical data

JUMBO LIFT NT	3200	3500	4000
Lifting capacity (kg)	3200	3500	4000
Lifting time approx. (sec)		36	
Lifting height (mm)		2000	
Drive-on height (mm)	10	5	-
Installation depth (mm)	10	5	135
Total width (mm)	202	20	2020
Platform width (mm)	61	0	610
Platform length (mm)	1460 - 2060	146	60 – 2160
Motor (kW)		3,0	
Power supply (V/Hz)		400/50	

THE RIGHT ACCESSORIES – THE PERFECT SOLUTION FOR EVERY APPLICATION	3200	3500	4000
Truncated pyramid pad	0	۰	۰
Polymer pad 50 x 150 x 340mm		٠	٠
Polymer pad 100 x 150 x 340mm	0	•	٠
Tuning ramps for low or sports cars, set = 4 units	•	٠	_
CE-Stop for in-ground installation (standard equipment)	-	_	٠
OPTION: SUFRACE TREATING			
Oxygen care coated for corrosive environment (dark grey)	•	•	•

TO BE PREPARED BY CUSTOMER & SCOPE OF DELIVERY

JUMBO LIFT NT	3200	3500	4000					
SCOPE OF DELIVERY								
Lift	with powder-coated platform							
Aggregat	Hydraulic unit, positioned front left in drive-on direction, length of the hydraulic hoses 1 m Hydraulic unit with oil-submerged mor positioned front left in drive-on direction, of the hydraulic hoses 1 m							
Additional	1 set = 4 units of polymer pads 100	x 150 x 340 mm, 50 x 15	0 x 340 mm					
Installation	Above-ground In-ground		In-ground					
CE-Stop	optional		incl.					
TO BE PREPARED BY CUSTOMER								
Foundation min. (mm)		160 160						
Concrete quality min. (normal reinforcement)	min. C20/25						
Bolts (pcs)		12						
Type of bolt (depends on foundation, see manual)		Hilti-V-5.8, M10						
hydraulic oil HLP ISO 32 (liters)		approx. 13						
Power supply (V / Hz / Amp.)		400 / 50 / 16						
Time-lag fuse (mm ²)		5 x 2,5						
Unloading (fork lift)		required						

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Lifts for passenger cars & transporter

SPRINTER

MIDRISE LIFT

ADDITIONAL WORKING SPACE

An additional working space in your workshop for fast working at any vehicle. The midrise sprinter mobil is an effi cient and mobile solution for tire service, painting and body work.

- Lifting height approx. 1000mm
- Anti -skid lifting platforms are galvanized and lengthwise adjustable





MAXIMAL FLEXIBILITY can be installed without screws on almost every flat and solid surface

MOBIL-SET (OPTIONAL) can be moved without any problem with Mobile-Set

SPRINTER MOBIL - YOUR ADDITIONAL WORKING SPACE



SPRINTER mobil 2500



FULLY HYDRAULIC SYSTEM

the hydraulic system of the lift works with two independent cylinders. A special safety device in the hydraulic circuit substitutes the conventional security latches and protects the lift from sagging. The mechanic synchronization is done by torsion bars at the bottom of the lift.

HIGH-PERFORMANCE POWER UNIT

the high-performance oil-submerged power unit with push buttons guarantees short lifting and lowering times.

SOLID STEEL CONSTRUCTION

FAST AND EASY TO SET UP

the lift is fully assembled at the factory and tested. To set up the lift, it will be unpacked, only filled with hydraulic oil and connected to a suitable electrical connection.





SPRINTER mobil 3000

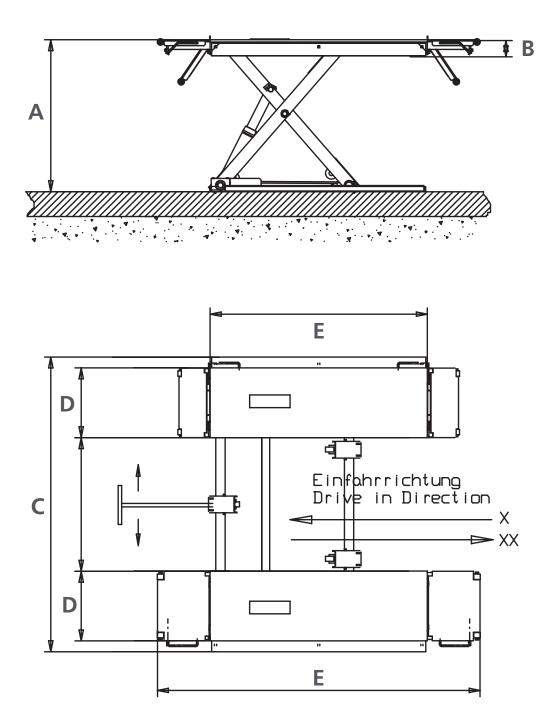
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Technical drawings SPRINTER



X: vehicle with front engine XX: vehicle with rear engine

Technical data

SPRINTER		2500		3000
Lifting capacity (kg)		2500		3000
Lifting time approx. (sec)			11	
Lifting height (mm)	А		980	
Drive-on height (mm)	В	102		115
Total width (mm)	С	1910		1900
Platform width (mm)	D		450	
Platform length (mm)	E	1400-1900		1400-2080
Motor (kW)			1,5	
Power supply (V/ Hz)			400/50/16	

OPTIONS & ACCESSORY

Fire galvanization of scissors and base plate for corrosive environment Mobil-Set Polymer pads • 50 x 150 x 340mm Polymer pads • 100 x 150 x 340mm Truncated pyramid pad Tuning ramps for low or sports cars, set = 4 units

TO BE PREPARED BY CUSTOMER & SCOPE OF DELIVERY

SPRINTER MOBIL	2500	3000			
SCOPE OF DELIVERY					
Lift	with galvanized	d platforms			
Aggregat	Mobile hydraulic control unit, positioned front left in drive-on directi length of the hydraulic hoses 3 m				
Additional	1 set = 4 units of polymer p	ads 50 x 150 x 340 mm			
Mobile set	option	al			
BAUSEITIG					
Bolts (pcs)	8 bolts when the lift she	ould be fix installed			
Type of bolt (depends on foundation, see manual)	Hilti-V-5.8	, M10			
hydraulic oil HLP ISO 32 (liters)	approx.	. 13			
Power supply (V / Hz / Amp.)	400 / 50	/ 16			
Time-lag fuse (mm ²)	5 x 2,	5			
Unloading (fork lift)	require	ed			

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Lifts for passenger cars & transporter

TOP LIFT

IN-GROUND LIFT

Your workshop in an attractive appearance with

- 1-piston for washing bay
- 2-piston lift with lifting arms, lifting platform and runways up to 8t

with 3 different installation variations

- TS 2,50m installation depth
- TTL SST 1,70m installation depth
- TTL NT 1,75m installation depth

TS – HYDRAULIC MECHANICAL

- cassette with mechanical crossbeam
- synchronization is ensured by a mechanical connection of the pistons
- crossbeam ensures synchronization of the piston and has an anti-twist function.
- installation depth: 2,50m





TTL NT – SAFETY STAR TECHNOLOGY

- Redundant hydraulic system with two independent hydraulic circuits
- No gear rack beside the lifting piston
- No cross beam between the lifting pistons is necessary
- Easy to install, thanks to the single piston
- Hydraulic unit is fixed on the lifting piston
- Emergency lowering from outside with internal control unit
- No change of lifting height cylinder stroke 2m!
- Low installation depth of max. 1,75mm through TTL (telescopic lifting piston)



TTL SST – SAFETY STAR TECHNOLOGY

- telescopic cylinders in singel cassettes with patented SST Safety System
- optimal for ceiling installation and area with high groundwater level
- electronic synchronization through proportional valve technique guarantees safe lifting at any working height
- installation depth: 1,70m

THE LIFTING PISTON

- hydraulic cylinders are integrated in guiding pipe and are treated against corrosion with a chromium coating
- hard piping instead of flexible tubes ensures a long-life and low maintenance



TOP LIFT for washing bay

IN-GROUND LIFT

• 1-piston lift with external power unit

• separated control panel can be installed up to 5 m away from the lift





- hydraulic unit with oil-submerged motor integrated in cannister
- a crossbeam secures synchronization and prevents rotation of the platform
- screwed, corrosion resistant hydraulic pipes from hydraulic unit to the cylinders (no loose flexible hoses)
- cylinders are protected inside the hard chromed guiding pipes

X-LIFTING ARMS

- fire galvanized, 2-times telescopic lifting arms
- vehicle will be lifted at pick-up points, therefore sillboard is accessible
- wide range of height adapters available www.nussbaum-group.de/accessory

H-LIFTING PLATFORM

- fire galvanized, lengthwise adjustable lifting platform for picking up vehicles at sillboard
- fast and simple to drive-on for a wide range of vehicles

TOP LIFT 1.35	Н	Х
Lifting capacity (kg)	3500	3500
Lifting height (mm)	1975	2064
Lifting/ lowering time (sec.)	40/35	40/35
Piston diameter (mm)	140	140
Arm extraction (mm)	_	630–1235
Lowest pick-up point (mm)		95
Platform length (mm)	1400-1900	
Drive-on height (mm)	60	
Installation depth (mm)	2520	2520
Motor (kW)	3	3
Power supply (V/Hz)	400/50	400/50



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TOP LIFT with lifting arms

IN-GROUND LIFT

- sillboard remains free
- flexibility for working at a wide range of vehicles from small cars to vans and off-road vehicles
- ideal for most of the works around the vehicle: body works, demounting big components, working with vans and small trucks, etc.

		2.35 TSK			2.35 TTL K SST			2.50 TTL K SST
	STANDARD	DG	MINI-MAX	STANDARD	DG	MINI-MAX	DG	DG
Lifting capacity (kg)	3500	3500	3500	3500	3200	3500	5000	5000
Lifting height (mm)	2070	2070	2070	2085	2085	2085	1990	2085
Lifting/ lowering time (sec.)	30/30	30/30	30/30	20/20	20/20	20/20	43/32	45/27
Piston diameter (mm)	140	140	140	172, 140	172, 140	172, 140	160	172, 140
Distance between pistons (mm)	2200	2200	2200	variabel	variabel	variabel	2600	variabel
Arms extraction (mm)	595-987	0-1789	595-987	595-1160	0-1789	618-943	0-1790	0-1790
Lowest pick-up point (mm)	83–120	115-190	75–185	115–190	115-190	75–185	115–190	115–190
Installation depth (mm)	2493	2493	2493	1463	1463	1463	2350	1463
Motor (kW)	3	3	3	3	3	3	3	3
Power supply (V/Hz)	400/50	400/50	400/50	400/50	400/50	400/50	400/50	400/50

*1 Mini Max-arm: 75–185mm

STANDARD

- powder coated 2-times telescopic lifting arms with adjustable turntables
- for passenger cars and small vans



MINI MAX

suitable for lifting vehicles with low clearance and deep-drawn side skirt:

- enormous adjustable range of 75–185mm
- multilevel quick adjustment
- operation with foot
- plug on adapter especially for passenger cars, adjustable range of 85–185mm. Lifting capcaity max. 4.200 kg (for 2.50 TTKAS and TTL K SST)

DG - DOUBLE-JOINTED ARMS

Unique construction with double-jointed per lifting arm for

- reaches 100% of pick-up points
- easy lifting of passenger cars through 90° of lifting arms positioning









TOP LIFT with lifting platform

IN-GROUND LIFT



fast lifting

- maximum accessibility
- unrestricted work on axes and wheels
- minimum space required
- low construction only 60 mm

	2.35 TS			2.35 TT	L TS SST
	STANDARD	XY	UNIVERSAL	XY	UNIVERSAL
Lifting capacity (kg)	3500	3500	3500	3500	3500
Lifting height (mm)	2010	2069	2069	2085	2085
Lifting/ lowering time approx. (sec.)	30/30	30/30	30/30	20/20	20/20
Piston diameter (mm)	140	140	140	172, 140	172, 140
Distance between pistons (mm)	1280	1280	1280	variabel	variabel
Platform length (mm)	1600-2400	1524-2107	1400 - 1930	1536–2120	1400-1930
Platform width (mm)		890-1817	650-1990	710-1750	650-1990
Platform (mm)	426	365	450	415	450
Drive-on height (mm)	60	77	60	77	60
Installation depth (mm)	2493	2493	2493	1458	1458
Motor (kW)	3	3	3	3	3
Power supply (V/Hz)	400/50	400/50	400/50	400/50	400/50



STANDARD

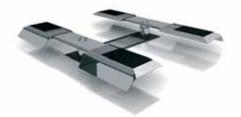
- adjustable lengthwise
- fully galvanized platform
- length- and crosswise traversable
- optional rubber plates replace polymer pads for fast lifting at sillboard

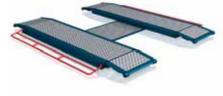
UNIVERSAL

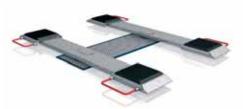
- complete length- and crosswise adjustable
- powder coated platform
- drive-on ramps are adaptable to floor unevenness

XY LIFTING PLATFORM

- length- and crosswise adjustable for optimal achievement of pick-up points
- fully galvanized platform
- incl. 4 rubber plates









Lifts for passenger cars & transporter

TOP LIFT with runways

IN-GROUND LIFTS

- smooth drive-on
- safe lifting
- easy to positioning
- low drive-on height (Ø140mm)
- possible to install above-ground or in-ground
- surface treatment: powder coated,
- fire galvanize, INOX Design, OXYGEN care







TSA & TTL A – flat runway

- flat runway
- optional axle jack

TTA – flat runway with lifting capacity of 5t

- drive-on ramps for transporter and small truck
- flat runway
- optional axle jack



TSAP – "piston in piston"

- runway + wheel-free lift with short stroke
- stroke
 wheel-free lift: adjustable lengthwise
- with short stroke
- runway with low drive-on height
- drawing shows INOX Design (option)

TSAP H - "2 in 1"

- runway + wheel-free lift is adjustable in drive-on direction and operates to full stroke
- the runway and wheel-free lift operate independently from each other to the full lifting stroke
- drawing shows INOX Design (option)

	2.35 TSA	2.35 TTL A	2.35 TSAP	2.35 TSAP H	2.50 TTA	2.50 TTA P	2.50 TTA P H
Lifting capacity (kg)	3500	3500	3500	3500	5000	5000	5000
Lifting height (mm)	2040	2085	1920	2080	1970	1870	1970
Lifting/ lowering time approx. (sec)	30/30	20/20	28/25	32/32	43/32	43/32	43/32
Piston diameter (mm)	140	172 140	172 140 (RFH)	172 140 (RFH)	160	160	160
Distance between pistons (mm)	1280	variabel	1250	1650 RFH: 1250	1500	1500	1500 RFH: 2600
Arm extraction (mm)	—	—	—	—		450-1255	450-1255
Lowest pick-up point (mm)	—	—				140-215	115–190
Lifting height wheel-free lift (mm)	—	—	400	1900		675	1990
Lifting platform length (mm)	_	_	1529-1949	1400-1900		_	_
Drive-on height (mm)	140	140	140	140 ID: 160	170	170	170
Runway length (mm)	4400	4400	4400	4200	4800	4800	4800
Runway width (mm)	596	596	605	610	700	700	700
Total length above-ground (mm)	4920	4920	5165	5273	5790	5450	5790
Total width (mm)	2042	2042	2050	1994	2300	2300	2300
Installation depth (mm)	2493	1605	2500	2500	2350	2350	2350
Motor (kW)	3	3	3	3	3	3	3
Power supply (V/Hz)	400/50	400/50	400/50	400/50	400/50	400/50	400/50



TTAP – "piston in piston"

- integrated lifting arms as wheel-free lift, ideal for the car reception area and for diagnosis, as well as work on wheels
- for transporters and small trucks
- wheel-free lift with short stroke
- runway length: 4.800mm



TTAP H - "2 in 1"

 the runways and the wheel-free lift with carrying arms work independently of each other. Both have a lifting height of approx. 2m.
 "You are actually getting 2 lifts in

one"

OPTIONS

JACK 2000 · JACK 2500
 air hydraulic scissor axle jack with
 lifting capacity of 2.000kg and 2.500kg
 for an universal pick-up vehicles,
 either at the outer points of the axis
 without relief of the suspension or in
 the center of the axis.

• LASER JACK

pneumatic scissor axle jack with lifting capacity of 2.000kg to pick-up vehicles at the outer points of the axis.

Lighting

integrated lighting at the runways, make working under the body work easier.

Installation cassette
 Preventing mistakes of foundation
 works by using of installation cassette.

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We replace your old piston lifts

LIFTS FOR EXISTING INSTALLATION CANISTER

Numerousness in-ground piston lifts also from other manufacturers, are in use since many years. Several of those lifts are now getting old. Sometimes those types of lifts are not produced anymore or a repair is not worth it. The NUSSBAUM new in-ground piston lift – TOP LIFT TTL NT can be placed in existing installation canister with relatively low effort – independently from the manufacturer.



ADVANTAGES

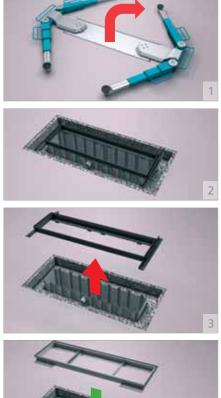
- Lifting capacity 3,5t to 5t possible
- No change of lifting height cylinder stroke 2m!
- Lower installation depth (max. 1750mm)
- Different piston distances are possible (NUSSBAUM standard: 1280mm, 2200, (2300mm), 2600mm)
- Different load suspension devices are possible (flat lifting platform & support arms)
- Easy assembly through telescopic-single piston
- Internal aggregate (standard) with wall tableau or external control unit possible
- No safety ratchet necessary
- No gear rack beside the lifting piston
- No cross beam between the lifting pistons is necessary
- No compressed air is necessary for the function of the lift
- Emergency lowering from outside with internal control unit (with compressed air)
- Installation is possible independently from the installation depth of the existing canister
- Hydraulic unit is fixed on the lifting piston.
- Available position of the existing empty pipe can be used

TO BE PREPARED BY CUSTOMER & SCOPE OF DELIVERY

TOP LIFT TTL NT		
SCOPE OF DELIVERY		
Lifting unit (2 telescopic lifting pistons)		
Installation frame with cover		
Internal hydraulic unit (standard), control unit at the wall		
Load suspension device depending on a and the loading capacity	distance between pistons	
TO BE PREPARED BY CUSTOMER		
Power supply	3PH,N+PE,400V,50Hz	
Protection	16 ampere fuse	

Only a few steps to your new lift!

PROCEDURES:

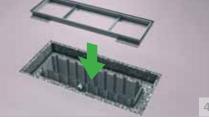


Picture 1: Disassembly of the existing lift



Picture 3:

Seperate the upper frame from the lower part of the existing installation canister



Picture 4:

Insert the installation frame, adjust and fix it with fixation anchors

Picture 5:

Set the concret reinforcement. Set the installation frame in concrete Upper edge frame = upper edge of the finished floor



Picture 6:

Insert the TTL NT lifting device with a fork lift and fix it Connect the electric and hydraulic pipes. Perform a trial

Picture 7 / 8: Assemble cover and load suspension device and test with vehicle







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BT 110 – Analogue display or PC system for brake testing?

The analog display indicates the most important results at a glance...

- ASA Livestream
- Analysis with reference
 value method on monitor
- Database
- BT Data can run on any PC
 in your workshop

Testing Equipment

for passenger cars, transporter and trucks

The perfect accessories for every application	

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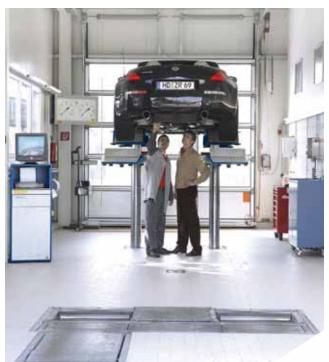
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Testing equipment

BT & NTS BRAKE TESTER & TEST LANE



ORGANISE YOUR OWN IDEAL TESTING STATION

Using the modular concept, you are able to select the types of testing that is required:

- Either using the repair tests such as brake testing which can also be placed outdoors.
- Or as a pre-service inspection with the suitable lift.
- Or a universal test lane which incorporates the brake test with others such as side slip, play detection and headlight testing.

Clear and simple: The most important results can be viewed at a glance with the digital analogue display,: The brake forces are shown on a 350 mm wide display as well as slip limits and high imbalance using signal lamps. The optional digital display extends the brake tester to a complete test lane. The analogue display has the advantage of clear and quick presentation of the results. A PC system can graphically display the values and results to present to your customer and save them in a databank. The test lane can also be connected via a workshop network system.

The flexibility of the NTS 8 xx-B series enables a complete test lane to be configured. You choose the applicable test stand and receive the results via the control unit and test lane software. The PC and monitor can be placed wherever you want as the PC and control unit are connected either via a serial cable or a cableless remote control connection.

BT & NTS – SHORT AND EFFICIENT

- The modular system offers standard solutions as well as additional configuration possibilities to enable the set up of an ideal test lane.
- All floor units are hot dip galvanized, thus optimally protecting them from corrosion.
- All brake testers are fitted with worm gears enabling rollers to self block assisting the exit of vehicles from the rollers.
- EUSAMA- oder BOGE Tester. All methods are dependent on country or manufacturers specifications as well as individual requirements. You can decide which system you require.
- Engineered and manufactured in Germany
- Our own development branch for software, measurement and control technology as well as electronics, mechanics and in house production, ensure flexibility, innovation and quality.

The pre-connected tes lane: NTS 8xxx You have the freedom to configure your ideal test lane: select the most suitable roller set with various options, Eusama-, Boge tester and side slip. The measurement and control electronics, PC and printer are situated together in

the control cabinet.

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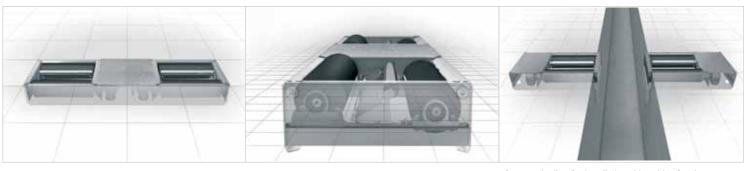
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Testing equipment

BT roller set which roller set is the most suitable?



Roller set with the standard testing width Raised rollers of 800 – 2200 mm and level rollers.

If you need to carry out periodical vehicle testing, then most countries use the testing speed of 5 km/h whereas loaded transporters usually use the maximum brake force range of 8 kN.

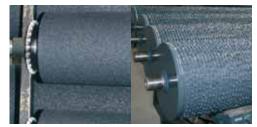
You can choose a roller surface coating of either welded construction or plastic corundum and both fulfil the international requirements for the coefficients of adhesion.

Braking efficiency calculations require the assistance of an optional weighing device fitted under the rollers or, in the case of a test lane, by acquisitioning the weight from the suspension tester. If you have a single brake tester, the weighing device is required.

Separated rollers for installation either side of a pit

CHOOSE YOUR ROLLER SURFACE COATING :

- Plastic corundum
- Welded design



YOU CAN CHOOSE BETWEEN 3 DIFFERENT POWER RANGES

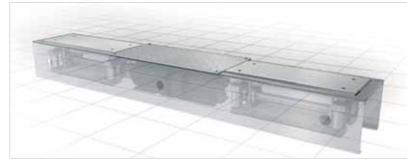
Testing speed	Max. brakeforce	Weight capacity
3,3 km/h	5 kN	3 t
5 km/h	6 kN	4 t
5 km/h	8 kN	4 t

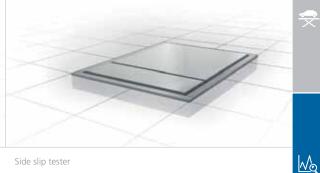
All test stands with plastic corudum have a roller diameter of more than 200mm and a traction value of more than 0,7 im dry and more than 0,6 in wet conditions. As option for more accurate slip measurement (requirement in some countries) an additional rotational sensor is available.



LOWERING AND LIFTING DEVICE

The optional lowering and lifting device eases the driving into and out of the rollers, especially vehicles that are fitted with front spoilers and in many cases they can substitute the requirement for roller drive over covers.





EUSAMA Tester. Alternatively we offer the BOGE Tester

Side slip tester

SUSPENSION TESTER

The vehicle suspension is an important safety aspect. It ensures a safe vehicle road holding, incorporating optimal steering and braking. The EUSAMA tester calculates the rebounding forces on the wheels through defined oscillation conditions whereas the Boge tester shows the axle absorption in relation to the static rebounding forces.

As there are no recognised pre-defined values for suspension testing, all two methods exist in parallel and we can offer the most suitable to your requirements.

SIDE SLIP PLATE

The side slip tester quickly checks the axle geometry and completes the test.

DEVELOPMENT & PRODUCTION

Modern productions processes mainly manufactured in - house ensures long lasting product quality. Enclosures and frameworks are all produced on modern laser plants and worm gears are developed and manufactured in our own factories.



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Testing equipment

Display and control units

ANALOGUE DISPLAY

The braking values are quickly and easily read with the 350 mm scale on the analogue display. The standard format also has signal lamps for the slip values and for exceeding the maximum brake force difference. The slip limit values and brake force difference limits can be adjusted.

The 14 digit LCD display (optional) shows other values such as axle weight and braking efficiencies (with optional weighing device). Test results from the optional suspension tester and side slip can also be read from the digital LCD display.



MONITOR DISPLAY FOR THE PC SYSTEM

The modern software system offers many possibilities and is essentially simple and intuitive to use on two levels. First, configure the software once to your requirements: The brake force graphical display can be depicted either in analogue or columns. Start the test through, either customer/vehicle input or driving onto the test lane. After configuration, the testing steps are confirmed and the rest is easy. You can configure 2 or more sequences and later on select the test procedure that is best suited to your requirements.



VARIOUS ANALYSIS AND INDICATION POSSIBILITIES

The perfect accessories for every application



AUTOMATIC ALL WHEEL RECOGNITION

This option is available on both analogue and PC versions of the brake tester. After the rollers have started, the test stand recognises if an all wheel vehicle is positioned in the rollers and then automatically changes the testing sequence to unregulated left – right running. A further important accessory is the pedal force meter which can be offered as a cable connected or remote control connected unit. This will enable the brake force difference to be calculated using the brake pedal force.

The brake force difference can be shown on the LCD display or printed out on the test report protocol.



Noise detection device

Printers for Analogue or PC configurations

Lowering and lifting device

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Testing equipment



Analogue display or PC system for brake testing?

Experience the best of both worlds in one system: BT 110 together with the Software BT Data offer amazing possi-bilities.

BT 110

The analog display indicates the most important results at a glance: the braking force is clearly shown on 350mm diameter scale. Moreover, an excessive braking force imbalance is symbolised through a standard signal lamp.

- Brake tester for passenger car and transporter
- 4 t axle load, 6 kN brake force
- One-piece galvanized roller set, including middle cover plates
- Electronic measuring system with strain gauges
- Switching on and re-start, start blocking protection
- Cabinet for wall mounting
- Splash-proof motor (IP54)
- Drive-by self-locking worm gear box
- Solid and lasting rollers with welded surface
- Differential indicator light and automatic lamp

BT 110 & BT DATA

Experience the best of both worlds in one system: BT 110 together with the Software BT Data offer amazing possibilities.

BT DATA

BT Data can run on any PC in your workshop – which just needs connecting via the BT 110 serial interface. BT Data is an Option, of course BT 110 runs as standalone brake tester as well.

THE WORKSHOP HAS AN ADDITIONAL BENEFIT:

Measured data can be stored along with customer data, diagramm and display can be provided by an inexpensive and common PC printer.

AND THE BEST: The software can be installed on an exsited PC in any workshop.

Made in Germany

Technical data

Brake tester	BT 110	BT 400 NTS 800-B / NTS 800	BT 410 NTS 810-B / NTS 810	BT 420 NTS 820-B / NTS 820
Measuring range	6kN	5kN	6kN	8kN
Testing speed	5km/h	3,3 km/h	5km/h	5km/h
Roller diameter	202mm	202mm	202mm	202mm
Motor power	3,5kW	2,5kW	3,5kW	4kW
Permissable axle weight	4t	3t	4t	4t
Conforms to RiLi from 2011 in Germany	ja	-	ja	ja
Distance between front and rear rollers	420mm	420 mm	420mm	420 mm
Level rollers	standard	standard	standard	standard
Rear rollers raised by 40mm	-	option	option	option
Single frame roller set	standard	standard	standard	standard
Split frame roller set for inst. in a pit	-	option	option	option
Testing width 800–2200mm	standard	standard	standard	standard
Testing width 800–2800mm	-	option	option	option
Weighing device	option	option	option	option
Lifting/lowering device	-	option	option	option

Suspension tester EUSAMA	
Permissable axle weight	2t / Axle
Vibrational amplitude	± 3mm
Frequency	25 – 0Hz
Motor power	2 x 2,5 kW
Measurment method	lifting force
Noise detection function	option

Suspension tester BOGE	
Permissable axle weight	2 t / Axle
Frequency	16 – 0Hz
Motor power	2 x 1,5 kW
Measurment method	vibrational force
Noise detection function	option

Side Slip	
Permissible axle weight	2,5 t
Measuring range	–15 m/km to +15 m/km

Network connections

All PC based test lanes (NTS6xx und NTS8xx) can be connected using ASA Network, GiegNet und MCTCNet protocols

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HLT HEADLIGHT TESTER

The testing and positioning of headlights should be checked at the workshop on every visit just as the oil levels and other important things are also checked.

It is extremely important that the correct headlight adjustments are maintained as any deviation could mean the driver loses meters in his line of sight or it could even be dangerous to other road users by blinding them with headlights that are incorrectly adjusted.



In order to adjust the headlight according to most legal requirements, the vehicle should be positioned exactly 10 meters in front of a white wall with the centre axis of the headlight beams reflected onto it. This is the basis of checking the deviation of the beams in percentage terms according the make and brand of the vehicle and correcting it.

This form of measurement is often impractical as it can cause some problems due to lack of space in the workshop. The HLT headlight beamer adjustment device from NUSSBAUM offers the mechanic a small workshop helper that does the job more efficiently. The integrated lens enables the required 10 meter distance to be minimized down to just a few centimeters. The headlight beamer tester and adjustment device is a robust precision instrument designed for simple user friendly implementation in the repair workshop. With a measuring height of between 270 mm to 1.300 mm it is ideal for testing not only headlights on cars but also for trucks.

The mobile headlight tester HLT 650 with luxmeter and data transfer possibilities completes the pallet of headlight testers from NUSSBAUM. In order to comply with country specific regulations, NUSSBAUM is able to offer further models in its program such as for Switzerland, Belgium, France and England.

HLT	600 / 610	620	650
Measuring height (mm)	270-1300	270-1300	240-1400
Measuring range (mm)	0-60	0–60	
Weight (kg)	30	30	33



With a testing range of headlight types from halogen through to Xenon, the unit is versatile and features a solid mechanical structure coupled with simplistic easy handling:

- VERSIONS
- HLT 600
- Mobile headlight tester without luxmeter
- HLT 610
- Mobile headlight tester with luxmeter
- HLT 620 For mounting on rails with luxmeter
- HLT 620 BMW incl. rails (2x1400mm & 2x1500mm) with luxmeter
- HLT 650 with rollers and luxmeter
- One handed height adjustment with automatic locking
- Fast set up by use of a mirror
- Control of the measurement reflection using a hinged mirror at the rear of the cabinet
- Simple lateral movement from each headlamp without complicated maneuvering
- No electrical connection or batteries required
- Ergonomic controls

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The tool for wheel alignment! Control directly the following actions...

- Calibration of the steering wheel sensor
- Support in the wheel alignment with rear wheel steering
- Control of the electro-hydraulic brake
- Display of the actual tire pressure as well as the nominal tire pressure

Wheel alignment

RoboLigner 7	

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WA 780

CCD WHEEL ALIGNMENT – High precision and easy wheel alignment with the NUSSBAUM wheel aligner in your workshop

WHEEL ALIGNMENT WITH 8 SENSORS CCD MEASURING TECHNOLOGY

- 8-Sensor CCD-Technology for a 360°-complete appraisalof all standard alignment and undercarriage values
- Measuring heads with small dimensions and weight (3.2 kg). The design allows for optimum protection against bumps and dust
- Data base with nominal vehicle data from over 20,000 vehicles with pictorial adjustment guides and yearly updatesPossibility to create data for own vehicles
- The large clearly arranged live reading display shows the permanent actual / nominal comparisons
- Direct measurement of caster and KPI
- Rim run our compensation (ROC) by moving the car or with2 point compensation (vehicle raised)
- Intuitive user interface as well as step by step guidance through the complete procedure
- Wireless data transmission. The transmission frequency of 2.4 GHz industry standard ensures trouble-free operation in the workshop
- Power supply of the measuring heads with rechargeable batteries (type AA).Charging of batteries on external charger (option) or via cable (included)



- Includes 4-point clamps for rims from 10"- 21", giving a fast rolling compensation of rim runout (ROC), brake pedal and steering wheel lock
- rechargeable batteries (type AA).Charging of Mobile cabinet for PC, printer, keyboard, monitor and stobatteries on external charger (option) or via rage for measuring heads and wheel clamps
 - Easy "plug and play" installation

SCOPE OF DELIVERY: Cabinet with large rollers • PC with mouse and keyboard • Operation system with USB interface and DVD drive • 19" monitor • colour ink jet printer



4 measuring heads; 4 measuring cable



4x 4-point wheel clamps



Steering wheel holder



Cable for charging batteries at cabinet (1,5m long)



Brake pedal holder

Main supply voltage (V)	200 – 240 Volt, 1 ph / 50 / 60 Hz Other voltages are available upon request
Display	19" Wide Screen Monitor
Rim size	10" - 21"
Toe front / rear axle	+- 20° / +- 0,08°
Einzelspurspur Vorderachse / Hinterachse	+- 10° / +- 0,08°
Camber front / rear axle	+- 10° / +- 0,08°
Caster front axle	+- 30° / +- 0,16°
Steering axis inclination	+- 30° / +- 0,16°
Max. steering angle	+- 24° / +- 5'
Dimensions with measuring sensors attached to cabinet (mm)	H x W x D 1350 x 1320 x 1750
Weight (kg)	ca. 120





LIFTS FOR THE WHEEL ALIGNMENT

All four post lift COMBI LIFT and scissor lift UNI LIFT for cars and transporters are available with:

- AMS Wheel Alignment Set: Installation of rear sliding plates, front recesses for turntables and mechanical locking system.
- Plus AMS Wheel-free lift and wheel alignment set: Wheel alignment set and wheel-free lift are aligned at one level with adjustable filling boxes between the wheel-free lift and the turntables.
- JACK
- The COMBI LIFT and UNI LIFT are available with several runway lenghts for cars and commercial vans.

Request for our wheel alignment package with lift!

ACCESSORIES



1987009A3VN • Adapter for light alloy rims



1987009A3WN \bullet Adapter for steel rims with plastic cover



Set emergency cables for data transmission and charging batteries (4 cables á 4m long)



1987009A3UN • Spoiler Adapter to lower the measuring heads for 55 mm

www.nussbaum-group.de/wa

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WA 950 & WA 970

CCD WHEEL ALIGNMENT

WHEEL ALIGNMENT WITH 8 SENSORS CCD MEASURING TECHNOLOGY

- Wheel alignment equipped with precise 8 sensors toe measuring technology, toe for the rear axle is physically measured and not, as with 6 sensor wheel aligners, calculated by the software
- Nominal data for over 20.000 vehicles, predominantly originals of the manufacturer
- Contantly update of nominal databank
- Possibility to create own vehicle database (e.g. for vintage car, etc.)
- Automatic operator guidance through complete procedure
- Printout (in color or black & white) all nominal and actual values of vehicles in a DIN A 4 page only
- Easy upgradable for wheel alignment according to OE standard and trucks
- Clear and colored display for all measura large 22" wide screen monitor
- 10° or 20° steering angle guidance (also without electronic turnplates)
- Future-proof and network compatible (asa network optional)
- Including 4 point wheel clamps that allow a fast rolling rim run out compensation, brake pedal and steering wheel holder
- Easy "plug and play" installation
- Extensive accessories
- Operating system Windows XP



LIFTS FOR THE WHEEL ALIGNMENT

All four post lift COMBI LIFT and scissor lift UNI LIFT for cars and transporters are available with:

- ment results (nominal and actual value) on AMS Wheel Alignment Set: Installation of rear sliding plates, front recesses for turntables and mechanical locking system.
 - Plus AMS Wheel-free lift and wheel alignment set: Wheel alignment set and wheel-free lift are aligned at one level with adjustable filling boxes between the wheel-free lift and the turntables.
 - IACK
 - The COMBI LIFT and UNI LIFT are available with several runway lenghts - for cars and commercial vans.

Request for our wheel alignment package with lift!



Made Germany

WA 950 WA 970 WA 970 MB	
Main supply voltage (V)	200 – 240 Volt, 1 ph / 50 / 60 Hz Other voltages are available upon request
Display	22" wide screen monitor
Rim size	12" - 21"
Total toe front / rear axle	+- 48° / +- 2'
Toe front / rear axle	+- 24° / +- 1'
Set back front / rear axle	+- 23° / +- 4'
Camber front / rear axle	+- 10° / +- 2'
Caster from axle	+- 24° / +- 9'
Steering axis inclination	+- 24° / +- 9'
Turn difference angle	+- 20° / +- 5'
Max. steering angle	+- 24° / +- 5'
Dimensions with measuring sensors attached to cabinet (mm)	H x B x T 1350 x 1320 x 1750
Weight (kg)	approx. 140

WA 950

- Wheel alignment with 8 sensors CCD measuring technology
- Data transfering via cable



WA 970

- Wheel alignment equipped with precise 8 sensors toe measuring technology, data transfer via radio frequency
- Industrial transmission frequency of 2,4 GHz ensures reliable operation in every workshop
- 4 measuring cables (2 x 4,5 m and 2 x 6,5 m) for emergency or service purposes
- Battery charging on the cabinet or via cable

WA 970 MB

- WA 970 homologation from MERCEDES BENZ
- Measuring procedure according to Mercedes Benz requirements
- Printout (in color or black and white) of all nominal and actual values on MB data sheet
- Software provided for assigning the chassis specification data using the RO-MESS inclinometer
- Data base with original Mercedes Benz nominal vehicle data
- The device can be checked constantly by means of the Testbed Monitoring System

ADDITIONAL SCOPE OF DELIVERY

- Mercedes mechanical turntables, capacity 1.500 kg, 450 x 450 mm
- 4 Spoileradaptor for original Mercedes sheel clamps
- 4 Adapterpins for original MB wheel clamps



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DiWaGo

DiWaGo – The tool for professional connection of the wheel aligner to the EOBD interface of the vehicle DiWaGo is connected directly to the EOBD interface and communicates with the alignment software of the WA 950 / WA970. With the DiWaGo all operations can be controlled directly from the wheel aligner.





DIRECT CONTROL OF THE FOLLOWING ACTIONS:

- Calibration of the steering wheel sensor
- Support in the wheel alignment with rear wheel steering
- Control of the electro-hydraulic brake to perform the rolling rim run out compensation and during the wheel alignment procedure
- Display of the actual tire pressure (if a TPMS is present) as well as the nominal tire pressure (if available in the databank)

ACCESSORIES

TURNTABLES



1987009A42 • Mechanical turntables max. wheel weight 600 kg | Measurement: 380 x 380 x 40 mm (set = 2 units)

GENERAL ACCESSORIES



 1987009A43
 1987009A69

 Drive on ramps for car
 Drive on ramps for truck turntables

ACCESSORIES ONLY FOR WA 950 & 970

ADAPTERS FOR 4-POINT-WHEEL CLAMP



1987009AJ1 • Extension adaptor 46 mm for rims with thick rim edge (set = 4 units, 4 sets required)

SPOILER ADAPTER



1987009A03 • Spoiler SHORT (3 holes) for wheel clamps A08, A09 and A79 (set = 2 units)



for truck rims

(set = 4 units, 4 sets required)

1987009A83 • Spoiler LONG (4 holes) for wheel clamps A08, A09 and A79 (set = 2 units)



1987009A00 • Mechanical turntables with sand paper surfaces max. wheel weight 1.000 kg | Measurement: 355 x 355 x 40 mm (set = 2 units)

1987009A12 • Accessory rack



1987009A89 • Mechanical turntables with buckled plate max. wheel weight 1.000 kg | Measurement: 355 x 355 x 40 mm (set = 2 units)



1987009A74 • Steering wheel spirit level, self centering

EXTENSION FOR WHEEL CLAMP



1987009A92 • Clamping range extension kit to increase range for 5" (set = 8 units)

SOFTWARE RELEASE



1987009AS3 • Mercedes Benz alignment procedure software release
1987009AS2 * VAG Multilink alignment procedure software release (VW, AUDI, SEAT, SKODA)
1987009AS1 • Animated graphics, software release
1987009AS7 • ASA netzwork, software release
1987009AS8 • Shim process software release
1987009AS8 • Shim process software release

1987009AS5 • Vehicle data software update. Recommended once a year.

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Robo Full automatic wheel alignment

A FULL AUTOMATIC WHEEL ALIGNMENT SYSTEM INCLUDING A SCISSOR LIFT – The **RoboLigner**

- Complete wheel alignment process, including the automatic run-out compensation is done in max. 5 minutes – no need to move the car at all.
- Base of the RoboLigner is high-precision, non-touch, CCT technology, with no need to attach anything to the rim and therefore is particularly gentle on rims.
- To acquire the data for the wheel alignment, a three-dimensional image from the wheel is created.
- The sensors are guided on two rails along the runways of scissor lift – UNI LIFT, whereby a minimum space for the complete system is required.
- The RoboLigner allows a complete wheel alignment process with a minimum effort for the operator, already during the vehicle reception.

Check a vehicle precisely, quickly and easily

- Use the possibility to offer your costumers preventive wheel alignment as a regularly service.
- For passenger cars and transporter up to a weight of 3,5t and wheel base up to 3.750mm including the automatic rim rund out compensation

Scissor Lift		Display and	d control unit
Runway length (mm)	5,000	Monitor	22" TFT wide-screen
Lifting capacity (kg)	3,500	Printer	Color ink jet printer
Drive on height (mm)	220	Max. – Dimension	1 60 × 0 60 × 0 60
Max. complete length (mm)	6,320	(m)	1.60 x 0.60 x 0.60
Max. complete width (mm)	3,350		

Requirements

Distance between wheels (mm)	1,800 up to 3,700 (4,050 without compensation)
Wheel width (mm)	400 up to 750
Total width (mm)	3,350
Wheel weight (kg)	max. 1,500
Vehicle weight (kg)	max. 3,500
Complete length in-ground (mm)	5,150
Complete length above-ground (mm)	6,325
Power requirements	3x400V / 50Hz or 3x208V / 60Hz
Air supply (bar)	min. 6
Ambient light (Lux)	max. 500



SCOPE OF DELIVERY

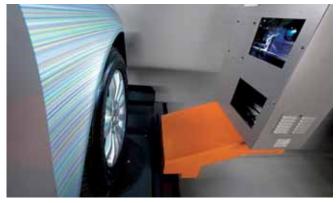
- Part number 0986400G28N
- Scissor lift with level platforms Oxygen care for optimum corrosion protection
- Long side sliding plates and turntables
- JACK for scissor lift pneumatic operated
- Light protection cover for probes
- Integrated lighting system
- Two rail guided measuring probes with non touch CCT Technology
- Cabinet with integrated lift controls and hydraulic unit
- PC, 22" Monitor wide screen and Color ink jet printer
- Graphic software with vehicle data bank over 20,000 vehicles; including original OEM processes (option)
- Steering wheel holder and brake pedal depressor

RoboLigner Robot

• The probes are attached to the lift platforms via an integrated drive system, which moved between the two axles

CCT – Color Coded Triangulation

- No need to use any additional parts attached to the rim or wheel for the optical measurement
- The colored light beams make it relatively easy to measure the rim/tire surface precisely since the video camera "checks" the changes from one colored line to the other



SCISSOR LIFT UNI LIFT

- Hydraulic Scissor Lift
- Maximum lifting height up to 1.920 mm for easy working under the car
- Optional in-ground and above-ground installation
- SST Safety Star Technology, the reliable saftey system which keeps both platforms perfect levelled in every working position

INTEGRATED SLIDING PLATES AND TURNTABLES



- Full automatic rim run out compensation via hydraulic moving sliding plates and turntables
- Integrated into the flat runways
- Self locked, during the wheel alignment process are automatically unlocked pneumatically

ADDITIONAL FEATURES



Cabinet – Complete with PC, printer, keyboard and hydraulic unit for the scissor lift



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JACK – the vehicle can be lifted in the middle of the axle or on the side via the extendable sliding arms



Light protection cover



Integrated lighting system with 6 tubes

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Tire Service

Rebalancing is history, The future is **Quick**Span[®].



Precisely & safely balancing through automatic fast clamping with double effective pneumatic cylinder Automatic recognition of the balancing program For wheels up to 70kg Made in Germany with 3 years warranty

Visit us on www.QuickSpan.de

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Tire service

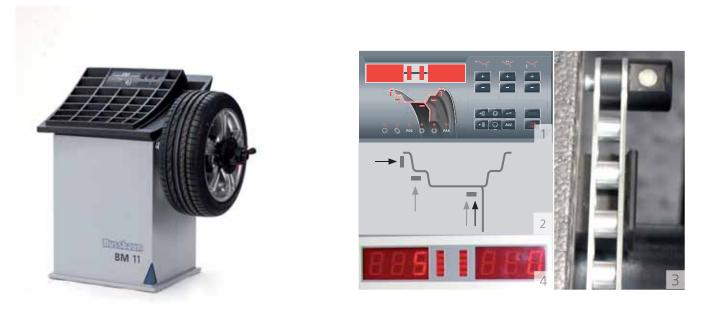
The perfect accessory for every application	
Technical data & Delivery scope	
	88
The perfect accessory for every application	
Scope of delivery	

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Tire Service

BM 11 WHEEL BALANCER – ENTRY LEVEL WELL FEATURED!



The BM 11 is the cost effective wheel balancer in the product portfolio that has been developed for the needs of the small workshop. With optional accessories, the BM 11 is an alrounder capable of balancing light truck and motorcycle wheels.



Due to the low measuring speed below 100 rpm, a wheel guard is not required enabling a saving of valuable workshop space. A wheel guard is nevertheless available as an optional accessory

The digital wheel balancers BM 11, BM30-2 & BM 40-2 assure with:

1 The LED Display is fitted with large buttons for operation and input of data as well as several LEDs to display the imbalance values and actual status of the balancer.

2 Automatic recognition of the balancing program during the data input speeds up the whole balancing process 3 Gauge arm – Automatic input of distance and diameter with gauge arm.

An overall more comfortable way of placing the weights onto the rim with the aid of a gauge arm incorporating a magnetic placement device.

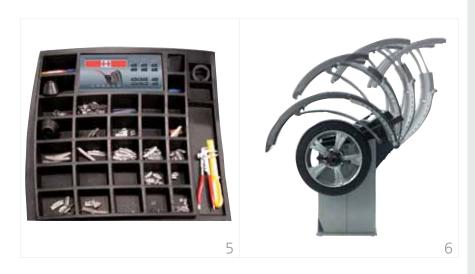
The width is calculated in an approximation manner through evaluation of the distance and diameter. The wheel width value calculated by this method requires hardly any correction, if any at all. Consequently the wheel width is indicated immediately after the input of the distance and diameter. If necessary, a quick correction can be made by the press of a button.

4 Relocation to the weight position for adhesive wheel weights – The new software automatically detects if the operator wants to read wheel data or place weights.

5 The weight tray is equipped with 31 compartments for wheel weights, cones as well as a compartment for the weight pliers and the adhesive wheel weight removal tool.

BM 30-2 & BM 40-2

WHEEL BALANCERS FOR THE WORKSHOP AND THE TYRE SERVICE



The digital wheel balancers BM 30-2 and BM 40-2 are equipped with all features and benefits that are required in workshops and small tyre service.



Electro Mechanical Brake

The integrated electro-mechanical wheel brake makes a brake pedal obsolete. After the measuring run the wheel is automatically braked in the correction plane thereby avoiding the need to move the wheel manually to the correct location for placement of weights.

As soon as the weight has been placed on the first position the wheel is rotated into the second position just by pushing the STOP/POS button. The wheel can be locked at any time in any position. This makes clamping of the wheel very comfortable and provides a semi automatic procedure.

6 The unique design of the wheel guard reduces the space requirement in the workshop to a minimum

The software for Wheel Balancers

SPLIT program to hide adhesive weights behind the spokes is simply activated by the push of a button. There is no need to input the number of spokes for the position of both wheel weights. The weights dont necessarily have to be hidden behind any particular spoke but they are selectable which means that weights could be positioned behind assimetrical spokes on rims.



MATCH program

Wheels with high imbalances can be balanced using the matching program. Matching optimizes the rim to the tyre in the best combination to reduce the large unbalance. If the result of a normal balance run is seen to be too high on any plane a LED illuminates and signals that there is too much static unbalance.



Integrated data base for wheel data of 20 different wheels

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All NUSSBAUM wheel balancers are equipped

with an internal data bank in which the wheel data for up to 20 wheels can easily be stored. This is an advantage when a workshop has to balance wheels that most of the times have identical rims. In this case entering the wheel data is not required and the workshop does create a lasting quality during the balancing process.



Tire Service

QuickSpan[®]

Tire Service is a challenge for the workshop because of the wide range of wheels and tire accessories. Inaccurate clamping takes time.

NUSSBAUM provides the solution for every workshop: QuickSpan®.





Automatic clamping of the wheel with the BM QuickSpan®...

- Shaft length allows clamping of large wheels.
- Unique design of the pneumatic clamping without a spring always enables a constant clamping force.
- Adjustable clamping speed allows individual setting of the balancer to the needs of the workshop and the operator.

Machine with QuickSpan® available in the following variants

- champ
- champ Touch
- comfort
- comfort Touch
- chrome
- chrome Touch



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BM Touch

INTUITIVE OPERATION MADE SIMPLE!

The wheel balancers of the BM Touch series developed by NUSSBAUM do not need any external input unit, since all functions are controlled by simply Touching the screen.

The settings are easy to work with as they're clearly displayed on the screen. It therefore saves time and money, and prevents any errors. All in all, the robust Touch screen is suitable to use in a manufacturing plant environment. The user can quickly and simply select the desired functions through the pictograms on the screen. The direct touch operation is intuative and can be learned very quickly. With the elegant and modern function of the BM Touch balancers, the workshop can show its expertise to their clients.



Settings

All relevant settings of the BM Touch are activated by Touching the relevant parameter and then the value that shall be changed.

Data input

The wheel data are taken automatically via the Fine readings 2 gauge arms. From that, manual data input is not required, nevertheless data can still be manually corrected if required.

SPLIT program

Instructions on how to carry out this process is clearly shown on the screen in pictograms.

Positioning in correction plane

After the measuring run the wheel is automatically braked in the correction plane. The wheel is automatically turned into the second position just by pushing the POS button.

Touching the imbalance value on the screen will display the exact value to the gram.

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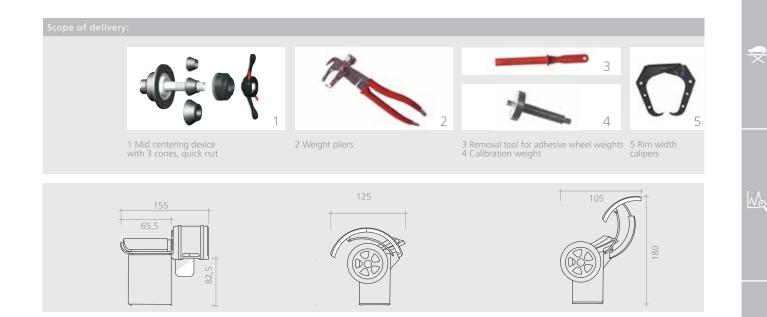


The perfect accessory for every application



1 Clamping plate for alloy rims 1987009W24N	is used in place of the standard clamping plate for the quick nut
2 QuickPlate	to clamp the wheel through the bolt holes. The bolt circle diameter is adjustable 1987009W82N QuickPlate 4-Loch 1987009W83N QuickPlate 5-Loch 1987009W84N QuickPlate 6-Loch
3 FlexPlate 1987009W8EN	for BM 11, 15 Touch, QuickSpan champ and champ Touch
4 Centering cone and spacer for light truck 1987009W75N	s centering range 120–174 mm
5 Motorcycle clamping kit 1987009W02N	Pro Bike Modul Standard
6 Universal clamping kit 1987009W01N	for closed centre hole wheels with 3-,4- and 5 stud holes with standard nuts and PCD tool.

Technical data & Scope of delivery



Manual wheel clamping	11	15 Touch	30-2	35 Touch	40-2	45 Touch
Automatic wheel clamping QuickSpan®	champ	champ Touch	comfort	comfort Touch	chrome	chrome Touch
Display	LED	15" TOUCH PC	LED	15" TOUCH PC	LED	15" TOUCH PC
Brake	-	-	\checkmark	\checkmark	\checkmark	\checkmark
Move to 1. position	-	-	\checkmark	\checkmark	\checkmark	\checkmark
Move to 2. position	-	-	\checkmark	\checkmark	\checkmark	\checkmark
Holder for 5 cones	0	0	0	0	\checkmark	\checkmark
Mains voltage (V)		200 – 240 Volt 1	oh / 50 / 60 Hz oth	er voltages availab	le upon request	
Mid centre hole diameter range (mm)			43 – 1	11,5		
Shaft diameter (mm)			40)		
Wheel width (inch)			1 -	20		
Wheel diameter (inch)			8 –	34		
Max. wheel width (mm)			53	0		
Max. wheel diameter (mm)			95	0		
Max. wheel weigth (kg)			70)		
Measurement rotation speed (UpM)	< 100	< 100	150	150	150	150
Input DISTANCE	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Input DIAMETER	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Input WIDTH	Manual	Manual	Manual	Manual	Automatic	Automatic
Space requirements (mm) B x T	1700 x 1300	1700 x 1300	1700 x 1600	1700 x 1600	1700 x 1600	1700 x 1600
Own weight approx. (kg)	125	125	135	135	135	135

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Standard equipment

not available in this configuration

onfiguration O

optional equipment

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Tire Service

TC 110 SMALL TIRE CHANGER – GREAT EFFICIENCY!



TC 110

The standard machine for a very simple and quick operation. The TC 110 is a semi-automatic tire changer with swing arm for easy and safe handling of rims in the range of 10 to 23 inches.

- Tire changer with manual side swinging arm
- Mechanical locking of the mounting arm
- Four self centering clamps
- Two pneumatic cylinders self centering clamps
- Clockwise and anticlockwise rotation of the clamping table through electric motor
- Pneumatic built-in safety valve (CE norms)
- Pressure regulator with water filter and lubricator
- Plastic protections for mounting head, jaws and bead breaker blade





Mounting head

2 plastic protections for a safe and careful mounting

Clamping of the wheel via 4 jaws • Clamping range 10"–23" • Additional jaws to extend the clamping range available as optional accessory

TC 205 & TC 205 2-speed

The fully equipped tire changer

TC 205

- Tire changer for the small independent workshop
- For rims with diameter from 10" 23" and a rim width up to 12"
- Compact & space-saving construction
- Mounting column, pneumatically hinged to the rear upon pedal operation
- Pneumatic locking and spaced apart position of the mounting head
- Turntable with 4 jaws to clamp the wheel
- Plastic protections for mounting head, jaws and bead breaker blade supplied as standard
- Pressure regulator with water separator and oiler
- With optional accessories capable to handle also motorcycle and light truck wheels
- Pneumatic mounting help PT 150 available as optional accessory
- Turntable with 2 directions (clock and anti clockwise) operated via foot pedal







The pneumatic mounting help PT 150 is available as an option and can be retrofit on site.

For TC 205, the mounting help assists the operator during the mount / demount operation, especially when working on low profile, UHP and Run Flat tires.



Bead breaker force of 27.000 N ensures proper bead breaking of all kind of wheels incl. motorcycle and light truck wheels

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Tire Service

TC 210



- Automatic tyre changer with pneumatic rear tilting post
- Simultaneous pneumatic horizontal and vertical arm locking
- Clockwise and anticlockwise rotation of the clamping table through electric motor
- Pressure regulator with water filter and lubricator
- Pneumatischen Arretierung sowie felgenferne Einstellung des Montagekopf
- Four self centering clamps
- Pneumatic built-in safety valve (CE norms)
- Plastic protection for mounting head, jaws and bead breaker blade are included in scope of delivery
- Applicable accessories for motorcycle's and light truck's wheels

TC 210

 In connection with the pneumatic mounting help PT 250 (optional) and wdk-Kit (optional), the machine is tested and certified by wdk according to wdk specifications for UHP and RFT



Clamping of the wheel via 4 jaws • Clamping range from 12"-25" and 12"-27" (TC 310 & TC 355)

Option: TIX inflation device – Helps inflating tires with soft side walls

TC 310 & TC 355



TC 310

 Pneumatic movement of the mounting head towards the rim ensures comfortable operation



TC 355

- Automatic mounting head, there is NO need to use a tire lever for the mount / demount procedure
 - The pneumatic mounting help PT 250 TL is available as an option and can be retrofit on site.
 - The mounting help assists the operator during the mount / demount operation, especially when working on low profile, UHP and Run Flat tires.
- L Automatic TC 255 und lever reguir

and RFT

scope of delivery

light truck's wheels

Automatic mounting head For TC 255 und TC 355 NO mounting lever required for the mount and demount operation • particularly suitable for UHP and Run Flat tires • Operation with one switch only • pneumatic movement towards the rim for easy and fast positioning of the head

and bead breaker blade are included in

• Applicable accessories for motorcycle's and

In connection with the pneumatic mounting

help PT 250 (optional) and wdk-Kit (optio-

nal), the machine is tested and certified by

wdk according to wdk specifications for UHP

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ire Service

TC 450





- Automatic mounting head, there is NO need to use a tire lever for the mount / demount procedure
- Tire changer with turntable and 4 jaws to clamp the wheel
- Standard bead breaker, breaking the up-per bead can also be done with the roller disc of the mounting help device
- Electromotor with Inverter technology continuously regulates the turntable speed from 7 – 17 rpm
- Turntable is height adjustable in 2 positions
- Bead breaker is adjustable in 2 positions
- Pedal operated tire inflator
- Storage with 4 compartments for valves, caps etc.
- Pneumatic mounting help device included in the extend of delivery
- Delivered completely mounted on a pallet in "plug and play" configuration
- Plastic protections for mounting head, jaws and bead breaker blade
- wdk certified

Technical data – Options – Pneumatic mounting help

Technical data	TC 110	TC 205	TC 210	TC 255	TC 310	TC 355	TC 450
INNER clamping range (inch)	12 – 23	12 – 23	12 – 25	12 – 25	14 – 27	14 – 27	14 – 27
OUTER clamping range (inch)	10 - 20	10 - 20	10 - 22	10 - 22	12 – 24	12 – 24	12 – 24
Max. wheel width (mm)	310	310	350	350	390	390	440
Max. wheel diameter (mm)	1000	1000	1100	1100	1100	1100	1120
Max. rim width (inch)	12	12	13	13	13	13	14,5
Turntable speed	6,5UpM	6,5UpM	6,5UpM	6,5UpM	6/12UpM	6/12UpM	7 – 13UpM
Weight (kg)	163	180	256	256	280	280	425
Dimensions (H x B x T) (mm)	1800 x 1300 x 1000	1800 x 1300 x 2000	1960 x 1340 x 1850	1960 x 1340 x 1850	2100 x 1340 x 1850	1960 x 1340 x 2000	2120 x 2800 x 1900
Power supply	230/400 Volt, 3	phase, 50/60 Hz reg	- other voltages uest	available upon	200 – 24	0 Volt, 1 phase,	50/60 Hz
Options	TC 110	TC 205	TC 210	TC 255	TC 310	TC 355	TC 450
Mounting arm swings manually to the side	•	-	-	-	-	-	-
Mounting arm swings pneumatically to the back	-	•	•	•	•	•	-
Mounting arm swings pneumatically to the sid	-	-	-	-	-	-	•
Manual lock of mounting head	•	-	-	-	-	-	-
Pneumatic lock of mounting head	-	•	•	•	•	•	•
Manual movement of mounting head towards rim	•	•	•	-	-	-	-
Pneumatic movement of mounting head towards rim	-	-	-	•	•	•	•
Automatic mounting head (NO tyre lever required)	-	-	-	•	-	•	•
Certified according to wdk	-	-	with PT 250 + wdk Kit	•			
wdk Kit	-	-	1987009M0SN	1987009M77N	1987009M0SN	1987009M77N	•
Pneumatic mounting help							
PT 40	1987009M0UN	-	-	-	-	-	-
PT 150	-	1987009M76N	-	-	-	-	-
PT 250 / 340	-	-	1987009M0MN	1987009M0MN	1987009M0MN	1987009M0MN	•

Scope of delivery
 Not available
 1987009MxxN
 Available as optional accessory

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The perfect accessory for every application

ACCESSORIES FOR CAR'S WHEELS



1987009M42N Set of plastic rim protections – Protects rim and tire when mounting UHP and Run Flat tires



1987009M84N Plastic mounting head including quick exchange device (requires 1987009M0PN)



1987009M1ZN Chain with 6 segments to mount UHP and Run Flat tires holds the bead in the drop center in max. 6 positions



1987009M1XN Bead clamp for steel wheels



1987009M1YN Bead clamp for alloy wheels



1987009M05N Roller board – Assists in the bead breaking operation



1987009M1NN Set of jaws to increase clamping range for 6" incl. plastic protections (set = 4 units)



1987009M0JN TIX inflation device – Helps inflating tires with soft side walls (requires 1987009M27N)



1987009M27N Food pedal inflation device FPI

Scope of delivery

ACCESSORIES FOR SCOOTERS AND MOTORCYCLES







1987009M09N Set of scooter jaws reduces clamping range for 4" (set = 4 units)

1987009M11N Set of motorcycle jaws increases clamping range for 4" (set = 4 units) 1987009M12N Kit for Go Kart Wheels Handles wheels from 5" – 13"

1987009M84N

Mounting head for motorcycle and scooter wheels including quick exchange device (requires 1987009M0PN)

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Scope of delivery	TC 110	TC 205	TC 210	TC 255	TC 310	TC 355	TC 450
Plastic protection for jaws (1987009M01N)	•	•	•	•	•	•	•
Plastic protection for mounting head	•	•	•	•	•	•	•
Plastic protection for tyre lever (1987009M02N)	•	•	•	-	•	-	-
Plastic protection for bead breaker blade (1987009M93N)	•	•	•	•	•	•	•
Maintainance unit with oiler, water separator and manometer	•	•	•	•	•	•	•
Quick coupling for air supply	•	•	•	•	•	•	•
Tyre lever	•	•	•	-	•	-	-
Plastic rim protection	1987009M42N	1987009M42N	1987009M42N	•	1987009M42N	•	•
Plastic tool for wdk mounting procedure	-	-	-	•	-	•	•
Chain with 6 segments to mount low profile and Run Flat tyres	1987009M1ZN						
Bead pressing roller attached to mounting head	1987009M24N	1987009M24N	1987009M24N	-	1987009M24N	-	-
Pedal operated tyre inflator	-	1987009M27N	1987009M27N	1987009M27N	1987009M27N	1987009M27N	•

Scope of delivery
 Not available
 Available as optional accessory



Air conditioning service, tools & accessories

ALL FOR THE THERMAL MANAGEMENT

Air Conditioning Service

Hella Nussbaum Solutions GmbH

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Air Conditioning Service

HUSKY Air Conditioning Service





The two brands Hella and NUSSBAUM, steeped in history, have combined their expertise for airconditioning service and thermal management under one roof.

Hella Nussbaum Solutions is the strong service brand for top-class products and solutions for professional thermal management.

Hella Nussbaum Solutions offers a com-

prehensive range to garages for professional air-conditioning servicing in conventional vehicles. Along with well-designed and highperformance service units for R134a and R1234yf refrigerants, garages will also find a wide range of tools, fluids, oils and consumables. Everything that saves effort and money when working in the garage. Always from a single source, always top quality.

For service too, Hella Nussbaum Solutions works hard to convince through professional technical advice, smooth logistics processes, training and fairly calculated financing options.

• scope of delivery - options

		2336				
ниѕкү	150	200				
Article number	8PS 179 500-201	8PS 179 500-011				
Suitable for car and truck air-conditioning system with refrigerant	R1	34a				
For electric and hybrid vehicles	•	Option				
Refrigerant analysis function	-	-				
With high-precision filling function	-	-				
Leak test function with test gas	Option	Option				
Temperature range	10 °C to 50 °C	10 °C to 50 °C				
Recovery rate	95%	> 99%				
Recharging precision	± 15 g at 10 °C to 50 °C	± 15 g at 10 °C to 50 °C				
Solution Öl /UV	± 1 g	± 1 g				
Tank capacity	10 kg	20 kg				
Tank heating	Quick and automatic with POWER BOOST & MULTIPASS Recycling					
Compressor	Specific for recovery 400 g/min @ 50 Hz 0°C					
Vacuum pump	Evacuation in perso	nal cars in 20 minutes				
Service hoses	3,0 m 5	5AE J2196				
Waste, PAG and POE oil capacity	Old oil 500ml, PAG & POE 250ml	á 500 ml, hermetic				
UV capacity	250 ml	250 ml				
Display control	4,3"-colour TFT Display	4,3"-colour TFT Display				
Printer	Option, Ticket 24 columns	Ticket 24 columns				
Interfaces	USB RS232	USB RS232				
Temperature sensor	Optional 5 m	Standard 5 m optional: Kit with wireless thermometer				
Languages	26 languages i	ncuding Chinese				
Mains voltage	230 V 50/60 Hz	230 V 50/60 Hz				
Size/Weight	1130 x 610 x 750 mm 95 kg	1180 x 650 x 750 mm 128 kg				
Performances	conforms t	to SAE J2788				
Conforms to the Ger- man automaker's requi- arement specification	-	-				
Certification/safety	CE TÜV Nord	CE TÜV Nord				
Origin	Developed and produced in Germany					

THE RIGHT ACCESSORIES FOR ANY WORK - find more in online catalogue of



A/C STARTER KIT Article number: 8PE 179 502-851



FLUSCHING KIT – for R 134a | Article number: 8PE 179 500-151



FLUSCHING KIT 100 – Article number: 8PE 351 310-001



EVIDIS – Article number: 8PE 351 331-801

HISK	- RANK		A REAL PROPERTY OF A REAL PROPER	99	
300	2000	2500	3000	3500	
8PS 179 500-021	8PS 179 501-021	8PS 179 501-031	8PS 179 501-041	8PS 179 501-051	
R134a	R1234yf				
•	Option	Option	•	•	
-	-	• purity at 98,5%	-	• Rpurity at 98,5%	
-	-	-	•	•	
•	Option	Option	•	•	
10 °C to 50 °C	10 °C to 50 °C	10 °C to 50 °C	10 °C to 50 °C	10 °C to 50 °C	
> 99%	> 99%	> 99%	> 99%	> 99%	
± 15 g at 10 °C to 50 °C	± 15 g at 10 °C to 50 °C	± 15 g at 10 °C to 50 °C	± 15 g at 10 °C to 50 °C	± 15 g at 10 °C to 50 °C	
± 1 g	± 1 g	± 1 g	± 1 g	± 1 g	
20 kg	18 kg	18 kg	18 kg	18 kg	
	Quick and automa	tic with POWER BOOST & MULT	IPASS Recycling		
	Specific	for recovery 400 g/min @ 50 Hz	0°C		
	Evacuation in personal cars in 20 minutes				
3,0 m SAE J2196		3,0 m S/	AE J2888		
á 500 ml, hermetic	á 500 ml, hermetic	á 500 ml, hermetic	á 500 ml, hermetic	á 500 ml, hermetic	
250 ml	250 ml	250 ml	250 ml	250 ml	
4,3"-colour TFT Display	4,3 colour TFT Display	4,3 colour TFT Display	4,3 colour TFT Display	4,3 ^{~-} colour TFT Display	
Ticket 24 columns	Ticket 24 columns	Ticket 24 columns	Ticket 24 columns	Ticket 24 columns	
USB RS232	USB RS232	USB RS232	USB RS232	USB RS232	
	Standard 5 m	optional: Kit with wireless the	ermometer		
	2	6 languages incuding Chinese			
230 V 50/60 Hz	230 V 50/60 Hz	230 V 50/60 Hz	230 V 50/60 Hz	230 V 50/60 Hz	
1420 x 650 x 740 mm 128 kg	1250 x 650 x 740 mm 128 kg	1250 x 650 x 740 mm 130 kg		1490 x 650 x 740 mm 130 kg	
conforms to SAE J2788	conforms to SAE J2788 conforms to SAE J2843				
-	-	-	-	•	
CE TÜV Nord	CE TÜV Nord	CE TÜV Nord	CE TÜV Nord	CE TÜV Nord TÜV Rheinland	
	Deve	eloped and produced in Germar	у		

Hella Nussbaum Solution GmbH on www.hella-nussbaum.com



OZONE GENERATOR – Article number: 8PE 285 100-521



OIL-TESTER – Article number: 8PE 351 229-131



FROMIERGAS LEAKAGE SEARCHER-SET Article number: 8PE 351 224-111



CLT 1 COMPRESSOR TESTER – Article number: 8PE 179 502-881

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No car reception?

- Use the possibilities of car reception and offer your customer an even better service.
- We offer the perfect solution with the NUSSBAUM DIALOGBOX.
- You will receive a fully equipped car reception as an additional working space for your workshop or as a stand-alone building.



You cannot afford waiting to start the job?

- If you have the piece of land and want to lose not a minute to start with the work, we have with our modular workshop carsatellite the fast and flexible building solution.
- You can use our Standard floor plans and choose the most suitable layout for your workshop. We make you a fix price offer.
- You only speak with us from the planning of the workshop equipment to the installation of lighting and compressed air.

Carsatellite

carsatellite Dialogbox	

carsatellite Service

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carsatellite

carsatellite THE COMPLETE PREFABRICATED WORKSHOP FOR PASSENGER CARS

carsatellite is the modular workshop by NUSSBAUM



Shortening "Time to Market"

Planning is fast and straight to the point Thanks to thanks to our standard workshops' designs. Manufacturing and installation in a record time thanks to a high level of pre-assembly in our factory the installation following the "Plug-and-Play" principle of our standard modules. This approach not only put you much earlier to work, but it also demands less of your time in monitoring the constructions works.

Advantage of the "one-stop-shop"

One face to the customer, we plan the building and the workshop and install all equipment and house services. Transparency through minimal planning and implementation risks. NUSSBAUM is a well-known partner in the automobile after sales market with worldwide presence through a network of locally based partners.

CARSATELLITE - THE MODULAR WORKSHOP FOR THE PROFESSIONAL CAR REPAIR SERVICE



cs Service, 4 bays and staff rooms



cs Service, 3 bays and Partiothek, reception and staff area



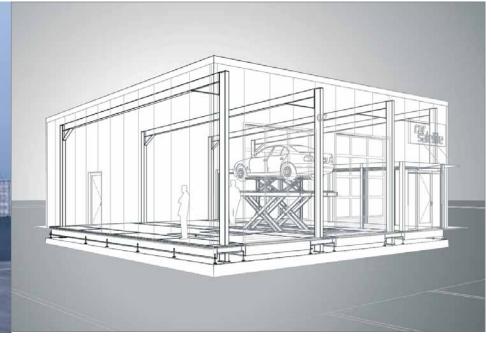
carsatellite workshop with 9 bays and Energy Pylons



Energy Pylon covering 2 bays in the workshop



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Reliable schedule, fixed investment

You will receive a fixed price without hidden costs or subsequent demands. Standardized construction modules and floor plans allow us to create the right proposal for your project.

Flexibility through standard modular elements

By using our standard modules the workshop can be easily enlarged at a belated date with extra working bays. It can also be easily disassembled and moved to another location (no capital loss). Minimum requirements to the base plate.



Workshop with several lifts for cars up to 5 Tons



cs Dialogbox for car reception as extendion oft he workshop



Dialogbox with sicssors lift and brake tester



Double car reception with customer area in the back

What does modular means?

At NUSSBAUM we have developed several standardized elements that enable a high level of pre-assembly. All technical installation, workshop equipment as well as the flooring are pre-installed in our factory.

- Multifunctional Floor: floor modules enable the "plug-and-play" installation
- Container boxes: they are pre-assembled and use for offices and storage
- Partiothek: storage system on the basis of a Container Box with sliding shelves
- Energy Pylon It supplies the working bays with all necessary media

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CONTACT US.







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