



AT A GENIUS LEVEL.

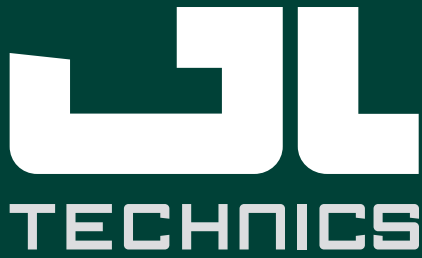


BRAKE MAINTENANCE, MINERAL OIL FILLING,
FUEL APPLICATIONS, ADBLUE® ACCESSORIES,
WHEELS + TYRES, TOOLS, TRANSMISSION FLUSHING

GL GMBH METALL- UND WERKSTATTECHNIK

GL
TECHNICS

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MORE THAN 20 YEARS OF EXPERIENCE

GL GmbH was founded in 1991 as a service provider for the manufacture of sheet metal parts and sheet metal assemblies. Thanks to its highly modern laser cutting, edging and welding technology, GL GmbH is nowadays considered to be one of the most innovative companies in the sector.

In 2000, brake maintenance devices were developed in-house, manufactured and marketed the first time – the starting shot for the founding of the workshop technology business sector.

Since 2005, the family company has been run by the founder's two sons, Thomas and Holger Henzler. In the Swabian location of Frickenhausen, highly motivated employees are now working in the business sectors of engineering, prototyping, sheet metal production and assembly.

RESEARCH, DEVELOPMENT AND MANUFACTURE "MADE IN GERMANY"

All GL TECHNICS products are developed, constructed and tested as prototypes at the Frickenhausen plant.

Series production only starts after a successful test phase. The entire sheet metal production such as laser cutting, edging and welding of the devices is carried out in Frickenhausen.

Assembly and the all-important quality checks are also carried out here. When purchasing components, only German suppliers with whom there is long-term, proven cooperation are taken into account.

Sales of GL TECHNICS devices takes place directly through automobile manufacturers and the wholesale trade.

WHAT MAKES US WHO WE ARE

In-house construction, sheet metal production and assembly all enable a high degree of individuality. It means that customer-specific requirements in both technology and design can be rapidly implemented. The high manufacturing depth in addition to the certification in accordance with DIN EN ISO 9001:2008 guarantee consistent quality standards for all GL TECHNICS products.

Delivery times can be set up flexibly and at short notice thanks to direct access to fabrication.

OUR INNOVATION PERFORMANCE IS AWARD-WINNING

New developments from GL TECHNICS have been awarded prizes in innovation competitions many times over the last few years. For example, the laser welding miller was awarded the "automechanika Innovation Award" in the "Body Repair Maintenance" category in 2006. The EasyLift wheel mounting aid was also successful: the state of Baden-Württemberg called it an "exemplary performance in the implementation of technical innovations".

RECOGNISE TRENDS, CREATE SOLUTIONS

Many years of experience, a sure instinct for current market requirements and well-founded industry know-how are just some of the things which make GL GmbH Metall- und Werkstatttechnik stand out. All customer requirements can be dealt with from development to series production.

AT A GENIUS LEVEL.



BRAKE MAINTENANCE

**BRAKE FLUID REPLACEMENT IS WORKSHOP ROUTINE.
THE INNOVATIVE SOLUTIONS FROM GL TECHNICS
MAKE HANDLING PERFECT!**

Both modern and functional design and quality "Made in Germany" make GL TECHNICS' brake maintenance devices stand out. They simplify the working cycle and meet all manufacturer specifications. They are particularly maintenance-friendly thanks to their modular, robust construction, and are also convincing thanks to their good price to performance ratio.

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THE PERFECTA SERIES

CLEAN, SAFE, QUICK: PROBLEM-FREE BRAKE LIQUID REPLACEMENT WITHOUT COSTLY BRAKE FLUID TRANSFER.

The well thought-out, practically tested device series from GL TECHNICS covers all application areas in the brake maintenance segment. From small, mobile devices up to transportable 60 L devices for dealing with large volumes, all possible workshop requirements are fulfilled.

The PERFECTA series is manufactured in Germany. The application-oriented product development enables one-man operation during brake servicing.

FURTHER FEATURES OF THE PERFECTA LINE OF DEVICES:

- **Suitable for ABS, ESP, EDS and SBC**
- **hydraulic pumps**
- **pulsating fluid flow to pressurise air bubbles out of the braking system**
- **automatic switch-off on empty container**
- **pressureless decoupling from vehicle**
- **venting of device during container changeover not necessary**
- **adapter available for all established vehicle types**

GL TECHNICS INNOVATION: THE PERFECTA PLUS EXTRACTION SYSTEM

The PERFECTA PLUS extraction system integrated into the device empties the expansion reservoir before filling with new brake fluid. This work cycle has been prescribed by leading automotive manufacturers for a long time. The reason for this is that even minor dirt deposits or smallest solid particles can cause damage in the system or in the wheel brake cylinders.

A further advantage of extraction is the saving of around 0.5 L of brake fluid, since the old fluid no longer has to be pressurised out of the system. This accelerates the working cycle. On top of this, the correct fill level can be set after the filling process.

PRODUCT OVERVIEW:

DEVICE	DRUM SIZE	PRESSURE REGULATOR	MOBILITY	EXTRACTION SYSTEM PLUS
P3	5 litres	none, fixed at 2 bar	portable	—
P4 DESIGN	5 litres	infinitely variable	portable	—
P20	20 litres	infinitely variable	mobile	—
P20 PLUS	20 litres	infinitely variable	mobile	X
P20 MB	20 litres	infinitely variable	mobile	—
P60	60 litres	infinitely variable	mobile	—
P60 PLUS	60 litres	infinitely variable	mobile	X

PERFECTA 3

SOLID BASIS DEVICE FOR BRAKE MAINTENANCE

The PERFECTA 3 model is perfectly suitable for mobile use during brake maintenance. It has all the basic properties of the PERFECTA series.

The working pressure is permanently set to 2 bar.

A rubber cone set is included.

SCOPE OF DELIVERY:
device with E 20 Adapter
(Euro Adapter).



ACCESSORIES:
Collection jar 1 litre
item no. 800.810.000

Collection jar 2 litres
item no. 800.820.000

TECHNICAL DATA	PERFECTA 3
max. container size	5 litres
Working pressure	2 bar
Mains voltage	230 V / 50 hz
Filling hose length	3.5 m
Dimensions im mm	300x200x300
Weight	6 kg
Item no.	900.003.000

PERFECTA 4 DESIGN

MOBILE AND HIGH-PERFORMANCE: THE PORTABLE DEVICE IN THE PERFECTA SERIES

The PERFECTA 4 DESIGN has established itself over many years of workshop deployment. It is perfectly suitable for mobile use thanks to its low weight. It is fitted with an infinitely variable pressure regulator and a universal rubber cone with integrated sieve.

The device is also available in a 110V version. Price on request.



SCOPE OF DELIVERY:
device with E 20 adapter (Euro adapter).

TECHNICAL DATA	PERFECTA 4 DESIGN
max. container size	5 litres
Working pressure	0.4 to 3.5 bar
Mains voltage	230 V / 50 hz
Fill hose length	3.5 m
Dimensions im mm	290x310x400
Weight	7 kg
Item no.	903.004.000

THE RELIABLE ALL-ROUNDER IN WORKSHOP DAILY ROUTINE

The PERFECTA 20, PERFECTA 20 PLUS and PERFECTA 20 MB brake maintenance devices remove brake fluid directly from the 20 litre original container. Transfer of the fluid is no longer required. One-man operation of the mobile device is possible without any problems.

They are fitted with an infinitely variable pressure regulator in addition to a universal rubber cone with sieve.

The PERFECTA 20 PLUS is additionally fitted with the PERFECTA PLUS extraction system.

Approved by Daimler AG.
Recommended by BMW AG.

The devices are also available in a 110V version. Price on request.

SCOPE OF DELIVERY:

Device with E 20 adapter (euro adapter) and 1-litre collection bottle.



Figure: PERFECTA 20 PLUS

TECHNICAL DATA	PERFECTA 20	PERFECTA 20 PLUS	PERFECTA 20 MB
max. container size	20 litres	20 litres	20 litres
Working pressure	0.4 to 3.5 bar	0.4 to 3.5 bar	0.4 to 3.5 bar
Mains voltage	230 V / 50 hz	230 V / 50 hz	230 V / 50 hz
Fill hose length	3.5 m	3.5 m	3.5 m
Dimensions in mm	1000 x 400 x 400	1000 x 400 x 400	1000 x 400 x 400
Weight	20 kg	21 kg	20 kg
Item no.	900.020.000	900.920.000	900.021.000

PERFECTA 60, PERFECTA 60 PLUS

OUR "GIANTS" IN BRAKE MAINTENANCE

The PERFECTA 60 and PERFECTA 60 PLUS have been constructed for especially large volumes.

The brake fluid is removed directly from its 60 L original container. This means that they can also be used in the commercial vehicle sector.

An infinitely variable pressure suction tube with sieve are also fitted.

The PERFECTA 60 PLUS is also fitted with the PERFECTA PLUS extraction system.

Approved by Daimler AG.
Recommended by BMW AG.



Both devices are also available in a 110V version. Price on request.

Figure: PERFECTA 60

SCOPE OF DELIVERY:

Device with standard suction tube, E 20 adapter (euro adapter) and two collection bottles (1 litre and 2 litres).

ACCESSORIES:

Suction tube for 60 L Daimler plastic container item no. 900.133.000

TECHNICAL DATA	PERFECTA 60	PERFECTA 60 PLUS
max. container size	60 litres	60 litres
Working pressure	0.4 to 3.5 bar	0.4 to 3.5 bar
Mains voltage	230 V / 50 hz	230 V / 50 hz
Fill hose length	3.5 m	3.5 m
Dimensions im mm	1000x510x560	1000x510x560
Weight	28 kg	29 kg
Item no.	900.060.000	900.960.000

TEST PRESSURE GAUGE
FOR BRAKE MAINTENANCE DEVICES



PRECISE MEASURING TOOL
FOR PRESSURE GAUGE TESTING

The pressure gauge measurement-accuracy on brake maintenance devices should be checked regularly. A reliable test measurement can be made using pressure comparison. Regular checks should be carried out according to vehicle manufacturers’ specifications.

TECHNICAL DATA	TEST PRESSURE GAUGE
Measuring range	0 to 4 bar
Display accuracy	Class 1.0
Temperature range	– 20°C, Tmax up to + 60°C
Housing	1.4301 stainless steel
Weight	0.5 kg
Item no.	950.015.000

UNIVERSAL ADAPTER SET FOR BRAKE MAINTENANCE



ENABLES BRAKE MAINTENANCE
ON ALL ESTABLISHED VEHICLES

The high-quality universal adapter set is essential for all independent workshops and tyre fitters. The adapters are made of aluminium and anodised. The set is compatible with 98 % of vehicles made by all manufacturers.

SCOPE OF DELIVERY:

- Adapter B 35
- Adapter E 20W
- Adapter G 75
- Universal adapter U 90K

Item no. 800.704.000



MINERAL OIL FILLING

COMMERCIAL VEHICLE OPERATIONS HAVE TO MEET THE HIGHEST SAFETY REQUIREMENTS, ESPECIALLY WHEN YOU ARE DEALING WITH THE MAINTENANCE OF IMPORTANT UNITS LIKE GEAR-SHIFT AND CLUTCH SYSTEMS.

With the „PERFECTA HY“ series, GL TECHNICS offers a professional solution for safe, professional and rapid hydraulic oil changes for shift and clutch systems.

PERFECTA 4 HY

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PERFECTA 20 HY

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PERFECTA 20 HY MOBIL

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THE PERFECTA HY SERIES

HIGH-PERFORMANCE AND VERSATILE: THE HIGH PUMPING CAPACITY GUARANTEES PROFESSIONAL HYDRAULIC OIL CHANGES TO SHIFT AND CLUTCH SYSTEMS IN THE HGV SECTOR.

When maintaining shift and clutch systems, regular exchange of hydraulic oil is necessary. With the PERFECTA HY series, GL Technics has developed devices which prevent air remaining in the system due to their high pumping capacities. The right device is available for every application area thanks to their transportable, portable or mobile construction. All models in the series are made in Germany which guarantees a high quality standard.

OTHER FEATURES:

- **throughflow >45l/h**
- **automatic switch-off on empty container**
- **pressureless decoupling from vehicle**
- **venting of device during container changeover not necessary**
- **simple handling even with one-man operation**

OVERVIEW OF TECHNICAL DATA:

TECHNICAL DATA	PERFECTA 4 HY	PERFECTA 20 HY	PERFECTA 20 HY MOBIL
max. container size	10 litres	20 litres	20 litres
Working pressure	0.5 to 3.5 bar	0.5 to 3.8 bar	0.5 to 3.8 bar
Mains voltage	230 V / 50 hz	230 V / 50 hz	230 V / 50 hz
Fill hose length	3.5 m	3.6 m	3.9 m
Dimensions in mm	400x200x205	960x500x400	375x740x365
Weight	9 kg	28 kg	14 kg
Item no.	900.504.000	900.520.000	900.620.000

PRODUCT OVERVIEW:

DEVICE	APPLICATION	PUMP	VEHICLE	MOBILITY
P4 HY	hydraulic clutches	hydraulic	MAN-TGA / TGL agricultural and construction machines	portable
P20 HY	hydraulic gear shifts and clutches	electrical	ACTROS mit HPS 2, ATEGO, AXOR, MAN-TGA / TGL agricultural and construction machines	mobile
P20 HY Mobil	hydraulic gear shifts and clutches	electrical	ACTROS mit HPS 2, ATEGO, AXOR, MAN-TGA / TGL agricultural and construction machines	in box for use in external services

PERFECTA 4 HY

THE PORTABLE BASIC DEVICE IN THE PERFECTA HY SERIES

Using the Perfecta 4 HY, replacement of hydraulic oil in shifts and clutch systems takes place safely and without any problems. The mineral oil is taken directly from the 10 L original container, which makes transfer a thing of the past.

The device is suitable for operation with hydraulic clutches. Furthermore, it is fitted with an infinitely variable pressure regulator and a hydraulic pump.

Thanks to its low weight of only 9 kg, the compact device can be easily transported and can also be used for mobile deployment.

THE DEVICE IS NOT SUITABLE FOR USE ON MERCEDES VEHICLES!

SEE PERFECTA 20 HY
OR PERFECTA 20 HY MOBIL
ON PAGE 14 AND 15.



SCOPE OF DELIVERY:

Device with three rubber cones for closing off original containers and E 20 HY adapter.

TECHNICAL DATA	PERFECTA 4 HY
max. container size	10 litres
Working pressure	0.5 to 3.5 bar
Mains voltage	230 V / 50 hz
Fill hose length	3.5 m
Dimensions im mm	400x200x205
Weight	9 kg
Item no.	900.504.000

PERFECTA 20 HY

SOLID SOLUTION ON TWO WHEELS...

The mobile device in the PERFECTA HY series is constructed for use with hydraulic shifts and clutches. Transfer is no longer required since the hydraulic oil can be removed directly from the 20 L Daimler original container (A 001 989 2403 12).

The PERFECTA 20 HY is suitable for ACTROS with HPS 2, ACTROS 963 and 964, ATEGO, AXOR and MAN-TGA / TGL.

It is fitted with an electrical pump and an infinitely variable pressure regulator. If the container is completely empty, the device switches off completely automatically. No venting is necessary after changing the container.

The PERFECTA 20 HY can comfortably operated by one man thanks to its user-friendly construction.

It is made in Germany, and guarantees a long service life in the workshop daily routine.

Approved by Daimler AG.

SCOPE OF DELIVERY:

Device with 3 rubber cones and E 20HY adapter.

TECHNICAL DATA	PERFECTA 20 HY
max. container size	20 litres
Working pressure	0.5 to 3.8 bar
Mains voltage	230 V / 50 hz
Fill hose length	3.6 m
Dimensions im mm	960x500x400
Weight	28 kg
Item no.	900.520.000



PERFECTA 20 HY MOBIL

... MOBILE HIGH POWER ON THE ROAD

The PERFECTA 20 HY MOBIL has been constructed for mobile deployment in field service. The device is technically equivalent to the Perfecta 20 HY and is just as powerful and efficient despite its transportable construction.

It has been fitted in a high-quality, extremely robust aluminium box. Inside, it is fitted with compartments for the 20 L original container, the 10 L collection container, the adapter set hoses in addition to holders for the adapter, hand pump and combination spanner.

Approved by Daimler AG.



TECHNICAL DATA	PERFECTA 20 HY MOBIL
max. container size	20 litres
Working pressure	0.5 to 3.8 bar
Mains voltage	230 V / 50 hz
Fill hose length	3.9 m
Dimensions im mm	375x740x365
Weight	14 kg
Item no.	900.620.000

Adapter for Mercedes-Benz commercial vehicles:

Manual pump for level setting,
ID: manual pump A, connection hoses B or C
Item no. 900.530.000

Return hose front flap, ID D
Item no. 900.537.000

Return hose clutch 6 mm, ID E
Item no. 900.531.000

Return hose clutch 8 mm, ID F
Item no. 900.532.000

FGG return hose for secondary
expansion container, ID G
Item no. 900.533.000

Collecting container, ID H
Item no. 900.534.000

SCOPE OF DELIVERY:

Pump unit with pressure regulator, pressure gauge, suction tube with connecting piece for direct removal from the 20 litres ET original container (A 001 989 2403 12), 7 to 11 mm combination spanners.

Filling hose (Y-hose), ID I
Item no. 900.535.000

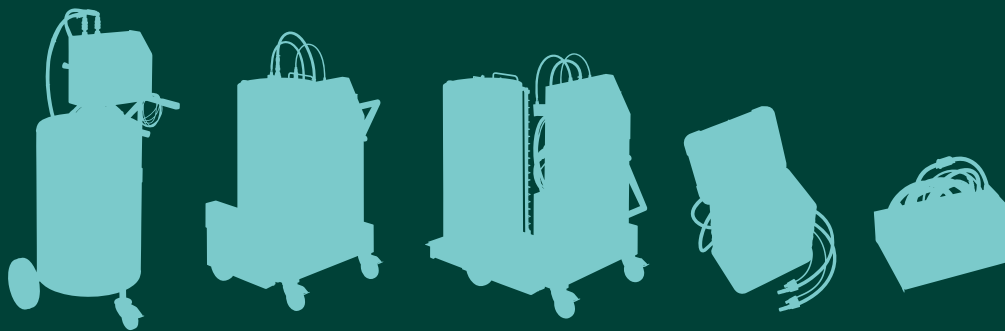
Y-adapter for device venting, ID K
Item no. 900.536.000

Filling adapter for storage container, ID L
Item no. 900.521.000

Adapter for MAN commercial vehicles:

Set for TGA vehicles with Kongsberg shift
Item no. 800.806.000

G45 HY for TGL
Item no. 800.446.000



FUEL APPLICATIONS

GL TECHNICS OFFERS INNOVATIVE SOLUTIONS FOR HANDLING FUELS.

The products in the TANK PRIMUS series guarantee rapid, safe emptying and filling of the fuel tank.

Venting of the fuel lines is, for example, necessary after replacing the diesel filter. The EEG diesel venting device safely takes over this process on HDEP/MDEG diesel motors.

TANK PRIMUS 20 MOBIL

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TANK PRIMUS 80

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TANK PRIMUS 100, TANK PRIMUS 100 S

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DEG DIESEL VENTING DEVICE

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THE TANK PRIMUS SERIES

CONVENIENT EMPTYING AND REFILLING OF FUEL TANKS

The devices in this series empty and refill diesel, petrol and ethanol fuel tanks rapidly and completely without the risk of explosion. The pneumatic drive for pumps and controller guarantees high transport quantities. Thanks to a gas recovery system, emission

substances are exchanged only between the vehicle and device tank, and cannot enter the environment.

The integrated filter regulator ensures clean air in addition to the right operating pressure for the pump.

OTHER FEATURES:

- **conductive extraction hose, dimensions 8 x 2.5 mm**
- **suitable for diesel, petrol and ethanol fuels**
- **made in Germany**
- **GS certified**

PRODUCT OVERVIEW:

DEVICE	FILL LEVEL DISPLAY	MOBILITY	EXTRACT/REFILL SWITCH	TANK CHANGEOVER
TP 20 Mobil	—	in box for field service	relocate hoses	no tank
TP 80	optical	mobile	relocate hoses	fixed tank
TP 100	optical	mobile	single-lever operation/ ball valve	manual
TP 100 S	optical	mobile	single-lever operation/ ball valve	mechanical lifting and lowering device for changeover tank

TANK PRIMUS SERIES ACCESSORIES

EXTRACTION PROBE SET

Item no. 400.121.000

ADAPTER FOR PORSCHE CAYENNE

Item no. 400.110.000

AUTOMATIC FILLER NOZZLE

If there is more fuel in the device tank than the vehicle tank can accept, an overfill safety device prevents overfilling of the vehicle (figure right).

For TP 80 item no. 400.111.000

For TP 100 item no. 400.109.000



TANK PRIMUS 20 MOBIL

FUEL TRANSFER IN FIELD SERVICE USE

After incorrect fuel filling, an accident or before vehicle transport: the compact devices in the TP series can be taken directly to where their excellent performance is required.

The pump unit can be transported comfortably and well-protected in the heavy-duty aluminium box. On top of this, the box has space for all the necessary hoses and adapters. The pneumatic pump has excellent performance with its approx. 10 L per minute.

A 20 L canister (not included in delivery) is suitable as a collection container for the fuel which has been pumped out.



TECHNICAL DATA	TANK PRIMUS 20 MOBIL
Air consumption	max. 200 NI/min
Tank capacity	no tank
Transport capacity	approx. 10 L/min.
Dimensions in mm	400x300x350
Weight	11 kg
Item no.	400.085.000

SCOPE OF DELIVERY:

Pump unit permanently fitted in aluminium box, with hose package for extraction or refilling.

TANK PRIMUS 80

TECHNICAL DATA	TANK PRIMUS 80
Luftverbrauch	max. 200 NI/min
Tankinhalt	88 litres
Pumping capacity	approx. 10 litres/min
Dimensions in mm	550x450x1100
Weight	35 kg
Item no.	400.080.000

SCOPE OF DELIVERY:

Pump unit with 88 litre tank in addition to hose package for extraction or refilling.

**SAFE EXTRACTION
IN THE WORKSHOP**

The transportable TANK PRIMUS 80 is fitted with a built-in 88 L tank. Switching over from extraction to refilling is carried out by simply re-coupling the hose connections. A protected optical fill level indicator shows the quantity of fuel in the device tank.

The TANK PRIMUS 80 is fitted with a variety of safety devices. For example, an earthing terminal and conductive rollers ensure equipotential bonding. On top of this, the device castors are provided with a locking brake to ensure that it is standing stably.

Approved by Daimler AG.



TANK PRIMUS 100, TANK PRIMUS 100 S

FUEL REPLACEMENT AT THE HIGHEST LEVELS

Our premium models TANK PRIMUS 100 and 100 S are especially safe and offer the highest in operating comfort. They are mobile and work completely automatically. The innovative GL TECHNICS construction offers both safety and time savings: automatic switch-off when the device tank is full. This prevents spillage of the fuel even if extraction is unattended.

Both devices are fitted with a 100 L changeover tank with protected optical fill level indicator. Switching over between extraction and refilling is controlled using a ball valve. An earthing terminal and electrically conductive rollers ensure equipotential bonding.



The TANK PRIMUS 100 S is also fitted with a mechanical raising and lowering device for the replacement tank (figure right). This means that the user can replace the tank without effort.

The devices can also be supplied with an integrated counting mechanism if required. Price on request.

SCOPE OF DELIVERY:

Pump unit with 100 litre tank in addition to hose package for extraction or refilling.

ACCESSORIES:

Additional changeover tank 100 litres
Item no. 400.103.000

Approved by Daimler AG.

Approved by Dr. Ing. h.c. F. Porsche AG.

TECHNICAL DATA	TANK PRIMUS 100	TANK PRIMUS 100 S
Air consumption	max. 200 NI/min	max. 200 NI/min
Tank capacity	100 litres	100 litres
Pumping capacity	approx. 15 litres/min	approx. 15 litres/min
Dimensions in mm	650 x 585 x 1200	650 x 585 x 1200
Weight	92 kg	112 kg
Item no.	400.100.000	400.102.000

DEG DIESEL VENTING DEVICE

PORTABLE AND EFFICIENT

When replacing the diesel filter or the high-pressure fuel pump, air remains in the lines after the fuel has been removed.

This means that venting of the diesel lines is necessary before the motor can be restarted.



The electrical DEG diesel venting device enables rapid and safe venting of HDEP/MDEG diesel motors. It uses a high-performance pump to transport diesel fuel into the lines so that retained air is able to completely escape the fuel circuit.

The sealing technology is suitable for diesel EN 590 and B7. The pressure can be infinitely regulated up to 10 bar. The extraction hose is fitted with a replaceable filter.

The device has been fitted with a storage compartment for hoses and tools. It is especially light and easy to handle, and therefore very suitable for mobile deployment.

Approved by Daimler AG.

TECHNICAL DATA	DEG
Working pressure	0 to 10 bar
Power supply	24 V
Suction hose length	3 m
Filling hose length	2.5 m
Electrical connection cable with battery clamps and fuse	5 m
Dimensions in mm	380x319x260
Weight	8 kg
Item no.	400.201.000

OMNIBUS ACCESSORIES:

Electrical connection cable „long” with battery clamps and fuse 15 m.
Item no. 400.102.100



ADBLUE® ACCESSORIES

ADBLUE® IS THE NAME OF THE FUTURE FOR COMPLYING WITH THE EURO 6 STANDARD FOR DIESEL CARS. GL TECHNICS HAS DEVELOPED FUTURE-ORIENTED WORKSHOP SOLUTIONS AND APPLICATIONS FOR CAR DRIVERS FOR THIS PURPOSE.

The environmentally-friendly SGR catalyst technology using AdBlue® has successfully been used for exhaust gas cleaning. Leading automobile manufacturers already make use of these advantages in order to fulfil the exhaust emission standards, which are becoming more and more stringent. GL TECHNICS can provide the following AdBlue® components for workshop use and for car drivers:

ADBLUE® SUCTION PUMP

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ADBLUE® DISPOSABLE FILLING HOSE

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ADBLUE® SUCTION PUMP

Residual liquid can be sucked out of the AdBlue® storage tank in a car using the suction pump. Since the durability of the urea solution is limited, replacement is prescribed for every service. All components in the pump are 100 % resistant to AdBlue®.

The heavy-duty housing is made of stainless steel. The pressure and suction hoses are made of silicon and fitted with a ball end made of stainless steel at each end.

Approved by Daimler AG.
Recommended by BMW AG.



TECHNICAL DATA	ADBLUE® SUCTION PUMP
Pumping capacity	approx. 1.3 litres/min
Mains voltage	230 V / 110 V
Suction hose length	2100 mm
Pressure hose length	1200 mm
Item no. 110 V version	400.300.000
Item no. 230 V version	400.301.000

SCOPE OF DELIVERY:
Complete pump unit with pressure and suction hose in plastic case.

ADBLUE® DISPOSABLE FILLING HOSE

AdBlue® can be quickly refilled from the canister into the car's AdBlue® tank drip-free using the patented filling hose which has been designed as a disposable solution for use on the road.

Since AdBlue® tanks in diesel cars are becoming smaller, refilling between service intervals becomes more and more likely. Since no AdBlue® is allowed to enter the vehicle interior or contaminate the drivers clothing during refilling, the filling hose is a clean solution. It means that the car driver himself can carry out the refilling.

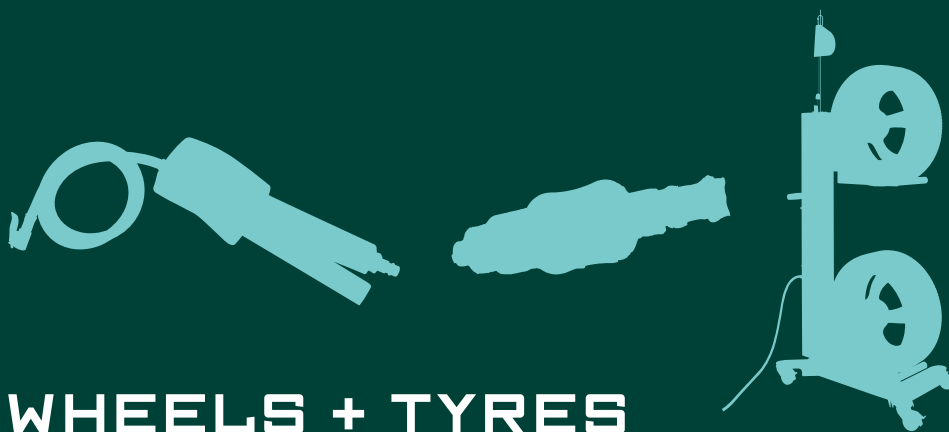
Workshops are therefore presented with excellent possibilities for marketing the filling hose together with the AdBlue® liquid itself.

Please ask us! Orders on request.



ADBLUE® FILLING AND EXTRACTION SYSTEM WORKSHOP SOLUTION

is available as a study at the time of going to press. Please ask for it!



WHEELS + TYRES

FOR YEARS NOW, WELL THOUGHT-OUT PRODUCTS MADE BY GL TECHNICS HAVE BEEN CONVINCING OUR CUSTOMERS. THE HIGH QUALITY OF THE DEVICES AND TECHNICAL INNOVATIONS NOW MAKE WHEEL CHANGING AND INFLATING THE TYRES EVEN MORE COMFORTABLE.

Wheel changing is becoming ever harder due to heavier wheels. The EasyLift from GL TECHNICS makes work considerably easier for the fitter. A real GL innovation is the new Type Hr valve coupling which doesn't slip off the tyre valve even at high inflation pressures.

EASYLIFT

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DIGITAL MANUAL TYRE INFLATOR

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Hr VALVE COUPLING

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EASYLIFT

SAVE ENERGY WHEN CHANGING WHEELS

The EasyLift makes wheel changing considerably easier. Wheels weighing up to 60 kg can be replaced rapidly and far less strenuously. The EasyLift is the quickest device on the market thanks to its high raising and lowering speeds. The wheel remains movable thanks to a mounting fitted with ball-bearing-geared rollers. The lifting device works with compressed air, and an innovative, patented mechanism for fine adjustment of the working height enables precise wheel fitting. The EasyLift remains mobile at all times thanks to its trolley. A well thought-out storage system for bolts, hooks for the manual tyre inflator and a hanger for the torque wrench ensure tidiness at the workplace.



Variable compressed air connection at column side (figure) or top. Two distributors for connecting a tyre inflator or impact screwdriver.

Optional extension set:

A crossbeam with balancer enables fatigue-free work with the impact wrench on the wheel.

The holder ensures that the device does not get in the way when it is not being used.

Safety at work:

According to the occupational accident insurance, the „change of wheels“ is work with an increased risk level. High workloads and physical overstressing are probable results for the fitter. For this reason, the EasyLift is an effective design measure in order to comply with the occupational accident insurance specifications or the ordinances of 90/269 EEC.

OTHER FEATURES:

- no power or battery necessary
- completely maintenance free
- one-man operation
- crossbeam and balancer are optionally available in one device.

Approved by Daimler AG.

Recommended by BMW AG.



TECHNICAL DATA	EASYLIFT
Carrying capacity	60 kg
Operating pressure	max. 8 bar
min. wheel size	135/80 R13
max. wheel size	305/30 R26
Working height	approx. 1400 mm
Depth/width/height without crossbeam and balancer	520x900x1500 mm
Height with crossbeam and balancer	2200 mm
Weight	50 kg
Item no. EasyLift	200.100.000
Item no. extension set crossbeam and balancer	200.110.000

DIGITAL MANUAL TYRE INFLATOR

ROBUST AND PRECISE

The compact digital manual tyre inflator measures the tyre pressure and either inflates or deinflates tyres quickly and precisely. It has several advantages compared with standard commercial analog devices.

Analog pressure gauges are extremely impact-sensitive. In the case of the GL TECHNICS digital manual tyre inflator, the electronic pressure sensor is well-protected inside the housing thanks to a solid rubber casing. The device is long-lasting and robust. The digital display is clearly laid-out. The tyre pressure can be very quickly read thanks to a reaction time of only 0.25 seconds.

Tyre pressure measurement is accurate to 0.05 bar. As soon as the device is applied to the tyre, the digital display segment carries out a self-test to ensure that the tyre pressure is reliably and correctly measured. The displayed value is therefore always the same as the actual existing tyre pressure. This means that the digital manual tyre inflator from GL TECHNICS avoids inaccuracies typical of analog devices due to, deformation of the spring tube, for example, which could lead to incorrect measured results. The device is calibrated (German type-approval 18.08 / 08.08). The digital manual tyre inflator is operated using standard batteries. No tools are required to replace the batteries.



TECHNICAL DATA	DIGITAL MANUAL TYRE INFLATOR
Measuring range	0 to 12 bar
Smallest display unit	0.05 bar
Maximum permissible operating pressure	15 bar
Temperature range	-10°C to +40°C
IP Protection Class	54
Power supply	2 x 1.5 V AAA microbatteries
Item no. calibrated version	201.001.000
Item no. calibration-capable version	201.002.000
Item no. PSI version	201.003.000
Item no. with calibration certificate	201.004.000
Item no. with tyre inflating connector	201.005.000
Item no. with Hr valve coupling	201.006.000

ACCESSORIES:

Tyre inflating connector (see illustration) and lever connector.

**Approved by Daimler AG.
Recommended by BMW AG.**

Hr VALVE COUPLING

INNOVATIVE PROBLEM-SOLVING FOR TYRE INFLATION



It is difficult to inflate a tyre with compressed air without routine and practice. Air can escape from the tyre very quickly if the standard valve coupling on the compressed air device (e.g. lever connector or clamp connector with tongue) is not seated precisely and sealed against the tyre valve.

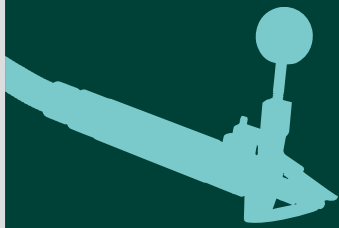
Using the patented Hr valve coupling, tyres can be rapidly inflated or de-inflated with air. The air pressure in the tyre can also be measured.

The GL TECHNICS innovation can be applied with one hand, without any great operating accuracy and without requiring force. It is self-sealing and self-holding. This allows even unpractised users to work on tyres without problems.

The connection between valve coupling and valve seals itself completely. After inflation, the valve and valve coupling are separated immediately so that no air escapes. Reliable functioning is guaranteed even at high tyre pressures, which shortens the inflation time.

The patented hydraulic functioning principle avoids wear and guarantees long service life.

TECHNICAL DATA	Hr VALVE COUPLING
max. permissible operating pressure	15 bar
Dimensions	Diameter 25 x 80 mm
Weight	55 g
Item no.	201.110.000



TOOLS

GL TECHNICS ALSO DEVELOPS TOOLS FOR MANUFACTURING-SPECIFIC APPLICATIONS

Production changes in automobile manufacturer require appropriate tools in car workshops. GL TECHNICS always has up-to-date industry know-how, and is therefore capable of developing and manufacturing individual solutions.

LASER WELDING MILLER

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LASER WELDING MILLER

SEPARATING LASER-WELDED SEAMS EASILY AND PRECISELY



The laser welding miller separates laser-welded seams quickly and without injury hazards for the user during body-work manufacture.

The tool works with a compressed air drive. The special feature of the patented system is precise guidance of the ball miller. The replaceable, oval-shaped baseplate enables the miller to be guided along edges or into difficult-to-access corners with low force. This means that even offset laser welds are easy to reach.

A fine thread is used to adjust how deep the miller cuts into the material to an accuracy of 1/10 of a millimetre. This pinpoint milling avoids material weakening and damage to paintwork, which are both disadvantages arising from the use of grinding machines.

Approved by Volkswagen AG.

SCOPE OF DELIVERY:

- Compressed air drive spindle, right-handed rotation, with compressed air hose (1.5 m)
- 2 hard metal ball millers (shaft 6 mm)
- 1 oval-shaped baseplate
- 1 replaceable swarf protector made of Makrolon
- 2 jaw spanners for replacing ball miller
- in plastic case

TECHNICAL DATA	LASER WELDING MILLER
Drive	compressed air milling spindle
Air pressure	6 bar
Idling speed	35,000 rpm
Rotation direction	clockwise
Noise level	72 db (A)
Air consumption	450 l/min
Power	280 W
Weight	2.6 kg
Item no.	631.900.000



TRANSMISSION FLUSHING

GL TECHNICS HAS THE „WASHING MACHINE“ FOR AUTOMATIC TRANSMISSIONS

In order to permanently safeguard the performance of an automatic transmission, flushing and cleaning of the transmission of oil residues and dirt deposits is necessary in addition to regular oil changes.

**AGS 20 FLUSHING DEVICE
FOR AUTOMATIC TRANSMISSIONS**

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AGS 20 FLUSHING DEVICE FOR AUTOMATIC TRANSMISSIONS

OIL CHANGE AND TRANSMISSION RINSING IN ONE WORKING CYCLE

Using the AGS 20 rinsing device, transmission oil can be replaced without problems and the transmission can be cleaned out in the same working cycle. It works without using additives. During the cleaning process, only heat and flow speeds ensure that dirt accumulations are flushed out into two high-performance filters. Renowned oil manufacturers are critical of the basic principle of transmission „filling for life“. The durability of the oil is only seldom defined and published by the

automobile manufacturers. Changing of the transmission oil after a certain mileage is therefore recommended.

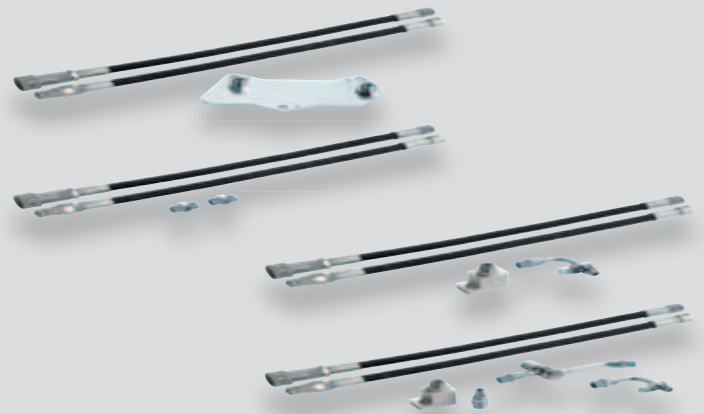
However, simply draining off and refilling is not sufficient. This is because only part of the old transmission oil is removed. Up to 60% remains in the converter and in various supply lines.

With the AGS 20, a half-hearted working cycle becomes a complete one: The oil change is supplemented with transmission flushing.

OTHER FEATURES:

- 2 high-performance filters (20 µm) clean the fresh and the waste oil during the process
- high-powered pump
- compressed-air drive
- extraction of oil sump (leftover oil) without additional device
- simple drainage and disposal of waste oil into collection system

Approved by Daimler AG.



ACCESSORIES:

- Volkswagen adapter set, item no. 400.430.000
- Renault adapter set, item no. 400.431.000
- Audi adapter set, item no. 400.432.000
- Mercedes adapter set, item no. 400.433.000

TECHNICAL DATA	AGS 20
Compressed air connection	8 bar
Waste oil container capacity	20 litres
Fresh oil container capacity	20 litres
Membrane pump delivery quantity	60 litres/min.
Bypass hose length	1500 mm
Connection hose length	2500 mm
Airborne noise emission sound pressure level	<70 db(A)
Temperature resistance	120°C
length x depth x height, approx.	700 x 600 x 1200 mm
Empty weight, approx.	78 kg
Item no.	400.400.000



GL GMBH METALL- UND WERKSTATTECHNIK

NÜRTINGER STRASSE 23-25

D-72636 FRICKENHAUSEN, GERMANY

PHONE +49 7022 94322-44, FAX +49 7022 94322-40

INFO@GL-GMBH.DE

WWW.GL-GMBH.DE