

**CLAS**<sup>®</sup>  
GARAGE SOLUTIONS



# OUR VALUES



## OUR SINCERITY

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About our relationships  
Transparency of exchanges  
Time-bound



## OUR PROXIMITY

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By our accessibility  
By listening to your needs  
By our accompaniment



**Discover us in  
this video !**

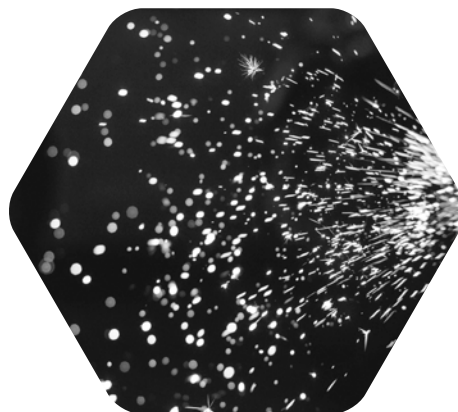




## OUR SIMPLICITY

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Our global solutions  
About our business  
About our organizations



## OUR CREATIVITY

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From our experts  
Boldly  
In pursuit of excellence

Our brand CLAS "Garage Solutions" based in Savoie (France), was created in 1996.

We have always been an innovative player in technical equipment and tools for light vehicles, commercial vehicles and heavy goods vehicles.

Today, we are evolving towards an ecosystem offering global solutions beneficial to all our partners.

We adapt to your needs and budgets, keeping it simple and responsive with expert, passionate men and women at the heart of digitalization at your service.

Strengthening our leadership in France, we are expanding to become a key international player.

# IN BRIEF

## SOME MAJOR EVOLUTIONS

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What a year! Developments, major innovations at your service!  
To improve our response to your needs, we have been working hard for the past 12 months!

## CATALOG... A NEW BEGINNING!

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### The catalog renewal

We have reviewed all our product categories for maximum simplicity.

There are **six main product groups** spread over **two universes**:

- on one side, all products dedicated to **workshop equipment**,
- on the other side, products dedicated to **vehicle repair**.

We have adjusted our product groups to better respond to your different activities and **follow the natural process of intervention**. Color codes and pictograms are here to guide you.

It will be much easier to discover our wide range of new products, more than 450 this year, from equipment to technical tools to hybrid and electrics, in an extensive and ever-expanding line-up.



## B-LINE RANGE IN FULL (R)EVOLUTION

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Combining budget and technicity for a non-intensive use, our B-Line range is expanded.

You will find more products, a wider range of solutions and many new developments.

You will discover these products along the catalog, as well as in a dedicated orange leaflet at the end of the catalog.



## PARTNERSHIPS WHICH ARE CLOSE TO OUR SPIRIT

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### The Club Technique Auto, a corporate approach that is part of our DNA!

We are involved in technical trainings for professionals and learning centers, with the "Club Technique Auto", founded in association with brands SNR® and Elring®.

The aim of the CTA (Club Technique Auto) is to share our know-how by increasing the awareness of the to good practices by educating them to new technologies with the help of specific tools.

Several trainings have already taken place and many more are to come, follow us on [club-technique-auto.com](http://club-technique-auto.com)



### Beyond educating! innovating!

We are always seeking new ideas and synergies, and in partnership with SNR®, we have developed new exclusive and innovative product solutions that meet the most demanding technical and durability requirements. Discover them in the "Bearing" or "CV joint" categories.

## DIGITAL YOU SAID?!

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### Always increasing digitization

Over the last few years, we have increased our investment in the digitalization of the brand, a choice on our part but also because of the success we have achieved:

- more online orders
- process dematerializations (after-sales service, returns,...)
- increase of video supports: one year of CLAS goes live, technical videos, tutorials...

Be sure to visit our different social networks.

And even if the time is digital, don't forget that behind all this, there are **women and men at your service!**



# VEHICLES SOLUTIONS



In this section, you will find all products that are specific to automotive repair and for all types of vehicles (LV, LCV, HGV, hybrids, electrics): from "fast service" interventions (braking, oil draining,...) to advanced interventions (engine timing, transmission,...) but also in addition to a full range of hybrid and electric vehicles, not forgetting body repair.



## 245 MECHANICS



**246** - TIRE & WHEEL



**251** - BRAKING



**264** - OIL DRAINING



**269** - COOLING SYSTEM



**274** - CHARGING SYSTEM



**278** - AIR CONDITIONING



**294** - STEERING & SUSPENSION



**304** - SILENT BLOCK



**310** - HUB



**325** - BEARING



**328** - CLUTCH



**330** - GEARBOX



**337** - TIMING TOOLS



**348** - SPARK PLUG & GLOW PLUG



**350** - INJECTORS



**362** - CYLINDER HEAD



**366** - PISTON & CYLINDER



**368** - FUEL



**372** - ADBLUE®

# IN BRIEF

## ONE COMPANY - ONE TEAM!

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### Beyond a company, a team! In full growth...

CLAS "Garage Solutions" is a team of passionate **women and men**, experts, committed to supporting you.

To achieve this, we have consolidated in all departments of the company by hiring people who combine **know-how and expertise** while encouraging internal promotion.



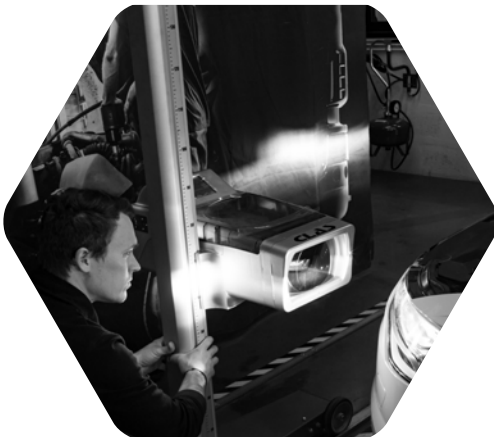
### Choosing CLAS means buying a product and the service that goes with it.

Establishing a **long-lasting relationship** based **on trust** with each of our customers is one of our priorities. Every day, we do our utmost to meet your needs and offer you adapted SOLUTIONS that save you energy and time.

It is a story of tools but also **a story of MEN**.

## IMPROVING & TESTING

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Our team of technicians test our tools daily in real life situations.

Their experience allows us to remain in a dynamic of progressive and continuous improvement, to have ideas and to put them to the test in only a few hours...

Thanks to our real-life testing laboratory, we develop a strong link between our Sales and Technical departments, always with a view to offering relevant tools that meet real needs.



# MECHANICS



**TIRE & WHEEL**

**P.246**



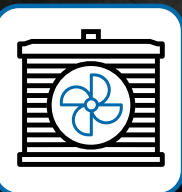
**BRAKING**

**P.251**



**OIL DRAINING**

**P.264**



**COOLING SYSTEM**

**P.269**





# WHEEL TIGHTENING

TN



Hex  
L.300mm

**OM 0400**

1" D. TORQUE CONTROL IMPACT SOCKET 32mm  
450Nm

**OM 0401**

1" D. TORQUE CONTROL IMPACT SOCKET 32mm  
500Nm

**OM 0402**

1" D. TORQUE CONTROL IMPACT SOCKET 33mm  
550Nm

**OM 0403**

1" D. TORQUE IMPACT SOCKET EXTRA DEEP 33mm  
650Nm

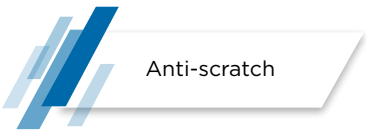


TN

**OM 7025**

1/2" SHEATHED ALU WHEEL RIM SOCKET SET (5 PCS)

Sheathed sockets to avoid rim damage, colored to enable immediate size identification.  
Also available on steel rims.



- Contents:**
- SA5015: 15mm impact socket (green)
  - SA5022: 17mm impact socket (blue)
  - SA5017: 19mm impact socket (gold)
  - SA5023: 21mm impact socket (red)
  - SA5021: 22mm impact socket (purple)



**OM 4535**

TORQUE MULTIPLIER R1:58 4800Nm+6 SOCKETS  
+ 2 ADAPTERS 1" HGV



Torquing and releasing

**Contents:**

- torque multiplier R1:58 L.270mm
- extension L.255mm
- sockets 24-27-30-32-33-38mm, H.80mm 1" drive
- adapters 1" female-female and 3/4" male-1" female H.80mm

**OM 0586**

3/4" 17mm WHEEL NUT SQUARE SOCKET L.90mm

**OM 0587**

3/4" 19mm WHEEL NUT SQUARE SOCKET L.90mm

**OM 0588**

3/4" 20mm WHEEL NUT SQUARE SOCKET L.90mm

**OM 0589**

3/4" 21mm WHEEL NUT SQUARE SOCKET L.90mm

**OM 0135**

ANTI-REBOUND HAMMER 4.5kg L.900mm

Allows HGV wheels to be detached when they have adhered to the hub.



- anti-rebound technology
- plastic handle L.780mm
- head dimensions: L .180xW.105xH.105



## WHEEL STUDS THREADING

### OM 9311

#### WHEEL STUD THREAD RESTORER HGV

This tool is designed to restore and align damaged threads.

Particularly suitable for wheel studs.



#### Instructions:

- choose the thread that matches wheel stud
- stretch the thread and place over the base of the stud
- loosen with the thread-holding socket

- M18x1.5mm DAF/IVECO/MAN/Renault/Volvo
- M20x1.5mm Mercedes/Scania
- M22x1.5mm DAF/Ford/MAN/Renault/Volvo/Mercedes/Scania
- 7/8"-11 Scania
- adapter hex size: 32mm

The set includes four threads to suit the most common HGV wheel studs thread sizes.

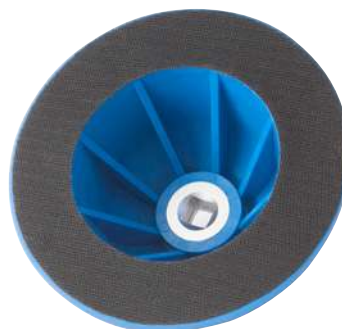
NO  
WARRANTY

### OM 9343

#### HUB FLANGE CLEANING DISC Ø90-150mm

Specially designed for mounting on a drill/driver or impact wrench, the tool allows quick and easy cleaning of corroded hub flanges, dirty and stuck rim seats, etc.

Ideal when changing discs or tyres, the tightening torque is no longer biased by the presence of rust or dirt.



#### Specifications:

- disc Øint. 90mm ext.150mm
- 1/2" drive

#### Options:

- CO9351: disk only
- SA9351: 1/2" square screwdriver adapter

NO  
WARRANTY





## TIRE REPAIRING

### OP 1465

#### TIRE RELEASER

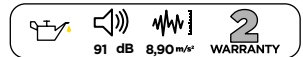
- Can be used on the vehicle
- Saves time
- Air regulator
- Handle exhaust
- Agricultural use

#### Specifications:

- travel: 80mm
- jaw opening: 68mm
- length: 380mm
- connection: 1/4"
- supply pressure: 6.2bar
- consumption: 113l/min



Connector supplied



### DM 1204

#### HYDROPNEUMATIC BEAD BREAKER + PUMP/HOSE/CONNECTOR

#### Bead breaker specifications:

- adapts to 17.5" to 60" wheels
- max. opening: 130mm
- air inlet, female threading 3/8"

#### Pump specifications:

- 700bar
- aluminum body
- load limiter
- silent exhaust
- dimensions: L.255xW.135xH.185mm

#### Contents:

- DM0204: HGV/agricultural vehicles hydropneumatic bead breaker
- OH0014: hydraulic air pump 10T 1/4" (700bar)
- SA0802: hose 1/4"
- SA0803: hydraulic female adaptor
- SA4197 : adapter 3/8" D.-1/4" D.





## TIRE INFLATING

## OP 0046BL

INFLATING GUN 0-12bar



B.LINE



Scale of 0 to 12 bar  
Flexible length: 50mm

NO  
WARRANTY

## OP 0049

INFLATOR GUN 0.7-12bar



- for passenger cars and vans.
- complies with directive 86/217/EEC
- standard UNI EN 12645
- graduations of 0.7 to 12bar

2  
WARRANTY

## OP 0679

12L ALUMINUM AIR BLASTER/BAZOOKA

Allows the tire bead to be placed on  
the wheel rim.



Light and  
ergonomics



Supplied with PU barrel  
and metal barrel

## Specifications:

- aluminum tank 12L
- PU barrel, does not damage rims
- barrel width: 80mm
- 45° ergonomic handle
- pressure gauge 0-15bar
- 7.5bar safety valve
- operating pressure: 7.5bar
- weight: 4,05kg

12  
L 2  
WARRANTY

## OP 0659

19I TIRE BEAD BLASTER CAR/LCV/HGV

19  
L 2  
WARRANTY

# BRAKING DIAGNOSTICS

## AC 5014

### BRAKE & ABS PRESSURE GAUGE SET+ADAPTERS

This set of brake pressure gauges includes 2 manometers, which connect directly in place of the bleed screws or connections specified by the manufacturer, and allow diagnostics on the brake system (including ABS system).

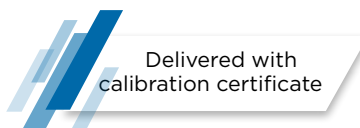


AC5011 : 1 x brake & abs pressure gauge set  
SA5011 : 1 x brake bleeder european adapters set

2  
WARRANTY

## AC 0520

### COMPARATOR+MAGNETIC BASE PACK



Comparator specifications (AC0514):

- measurement range 0 to 10mm
- travel/turn: 1mm
- resolution 0.01mm
- chromed-steel case Ø57mm
- fixing rod Ø8mm
- point zero locking screw

Magnetic base specifications (AC0515):

- joint locking
- magnetic base, attraction strength 80kg
- height: 235mm
- vertical stalk Ø12mm
- weight: 1,850kg



2  
WARRANTY

## AC 0519

### CALIPER BASE Ø DISKS AND BRAKE DRUMS

#### Specifications:

- working range: 160mm-365mm
- fits a larger range than most similar products on the market
- high-grade steel
- imperial and metric measurement scale



2  
WARRANTY

## AC 5004

### BRAKE FLUID TESTER PROBE

Allows to control the quality of the brake fluid by checking the quantity of water in the fluid. Clear, simple and quick reading of the test result (green/orange/red LED system).



Dot 3-4-5

2  
WARRANTY

## BRAKING REPAIRING

### OM 8043

#### HYDRAULIC BRAKE PIPE FLARING TOOL SET DIN/SAE Ø4.75-5-6-8mm

This device makes it possible to remake the brake pipe collars. It will produce SAE or DIN impressions, single or double on 4.75mm, 5mm, 6mm or 8mm pipes.

Does not require hose removal

##### Contents:

- hydraulic gun flaring brake hoses
- frame press flaring brake hoses
- handle M8x1.25 L.119mm
- SAE/DIN die brake hoses Ø4.75mm
- SAE/DIN die brake hoses Ø5mm
- SAE/DIN die brake hoses Ø6mm
- SAE/DIN die brake hoses Ø8mm
- punch OP1 for pipes Ø4.75-5mm
- punch OP1 for pipes Ø6mm
- punch OP1 for pipes Ø8mm
- DIN punch for pipes Ø4.75-5mm
- DIN punch for Ø6mm pipes
- DIN punch for Ø8mm pipes
- punch OPO
- punch 45° Ø4.75-5-6mm
- punch 45° Ø8-10mm

SAE: male cone  
DIN: female cone



2  
WARRANTY

TN

### OM 8047

#### DIN/SAE BRAKE LINE REPAIR KIT

No need to remove the line



Flash to  
watch the  
video!

This tool lets you reshape brake line collars. It produces single or double SAE or DIN shapes on 4.75mm, 5mm or 6mm lines

SAE: male cone  
DIN: female cone



2  
WARRANTY

TN

### OM 8050BL

#### 10 PCS REPAIR TOOL SAE MALE/FEMALE SET



##### Contents:

- adapters: Ø3/16" (4.75mm)-5/8"-1/2"-7/16"-3/8"-5/16"-1/4"
- tube cutter Ø3 to 30mm

SAE: male cone  
DIN: female cone



SA 5323 3/16" ADAPTER

Spare part of OM 8050BL/OM 8050

2  
WARRANTY

TN



**OM 8157****BRAKE HOSE RECTIFIER**

Allows easy rectifying of copper brake hoses supplied as a coil.



- knurled handle for a better grip.
- delivered with 3 interchangeable adapter sets:  
4.75mm (3/16"), 6.35mm (1/4") and 8mm (5/16")

**2**  
WARRANTY
**OM 8090****MINI TUBE  
CUTTER Ø3-22mm**
**2**  
WARRANTY
**OM 8057****MANUAL BRAKE LINE  
BENDER Ø3-Ø4-Ø6mm**
**2**  
WARRANTY
**EG 0565****COPPER CROWN  
Ø4.75mm L.7.62m**

Dimensions:  
• Ø inner 4.75mm  
• Ø external 5mm

**76 m** **NO**  
WARRANTY
**EG 0007****ASSORTED BRAKE LINE FITTINGS SET (135 PCS)****Contents:**

- SA0771: brake lines connectors M10x1 Ø4.75mm stepped base L.18mm 50 pcs
- SA0772: brake line nuts M10x1 Ø4.75mm 15 pcs
- SA0773: brake line connectors M10x1 Ø4.75mm L.16mm 20 pcs
- SA0774: brake line connectors M10x1 Ø4.75mm stepped base L.20mm 20 pcs
- SA0775: brake line nuts UNF 3/8" Ø4.75mm 10 pcs
- SA0776: brake line connector UNF 3/8" Ø4.75mm stepped base L.20mm 20 pcs

**NO**  
WARRANTY



OM 0358

HGV BRAKE PLIERS L.670mm  
OPENING 200mm



TN

OM 0357

BRAKE PLIERS HGV L.520mm  
OPENING 210mm



TN

OM 0320

BRAKE DISMOUNTING TOOL  
L.450mm-620mm



TN

OM 0359

DRUM BRAKE PLIER IVECO/VOLVO WITH  
Z-CAM

Ideal for opening and fixing the brake shoe  
retaining spring.



Suitable for Iveco, Volvo Z-cam : N7, N10, N12, F7, F12,  
F16, FH12, FH16, FL7, FL10, ERF E series, EC series



TN

OM 0390

HALDEX BRAKE LINKAGE  
ADJUSTER EXTRACTOR



TN

OM 0391

BPW BRAKE LINKAGE  
ADJUSTER EXTRACTOR



TN

**OM 0679****14 BIT STRIKING SCREWDRIVER SET**

Bits:

- slotted 5-6-8-10-12mm
- hex 4-5-6-8mm
- phillips 1-2-3-4
- torx 40



TN

**OM 8023****BRAKE SPRING TOOL**

Keeps the handbrake cable spring compressed to make the cable easy to attach to the brake lining.



TN

**OM 8022****SPRING COMPRESSION TOOL**

Easily compresses spring cups when replacing rear brake linings. The striated cone ensures that the cup is held securely for locking.



TN

**OM 8052****BRAKE LINING PLIERS**

L.330mm



TN

**OM 8053****HANDBRAKE CABLE PLIER**

TN

**OM 0503****EXPANDING ENGINE CYLINDER HONE**

Allows quick cleaning and de-icing of cylinders by removing carbon deposits. Bevelled stones for an optimal contact surface and more precision. Flexible, diamond knurled shank for a better grip in the chucks.

**Specifications:**

- adjustable from Ø50 to Ø180mm
- SA5503: 100x11mm stones 3pcs
- grit 240 medium



TN

Allows the brake caliper screws to be fitted and removed without removing the coupling lever.


**OM 0418**
**3/4" E18 STRIKING WRENCH L.219mm**
**Applications:** Man TGL/TGM

**OM 0420**
**3/4" E20 STRIKING WRENCH L.219mm**

Man TGL/TGM

**OM 0424**
**3/4" E24 STRIKING WRENCH L.219mm**

Man TGA/TGS/TGX

3/4" drive for use with torque wrench.  
Integrated torque and effective length calculation rule.



Allows the brake caliper screws to be fitted and removed without removing the coupling lever.


**OM 0423**
**3/4" M24 STRIKING WRENCH L.219mm**

SAF

**OM 0426**
**3/4" M26 STRIKING WRENCH L.219mm**

DAF XF95/XF105/196

3/4" drive for use with torque wrench.  
Integrated torque and effective length calculation rule.


**OM 4526**

**2 FEMALE TORX SOCKETS FEMALE  
E20-E24 D. FOR BRAKE CALIPER MAN**



For adjusting brake caliper  
Exercice: hexagonal 30mm


**OM 8029**

**ABS SEALANT INSTALLATION TOOL VOLVO/  
RENAULT**


**OM 0356**

**CLAMPS FOR RILSAN PIPES Ø6-8-  
10-12-16mm**



This tool is necessary for inserting notched connections into a rilsan/polyamide pipe as it keeps tire pipes (brake) or fuel pipes in good condition.  
It can be used for Ø6-8-10-12-16mm thanks to its adjustment knurled screw.  
Mainly used for heavy vehicles such as buses, coaches, trucks, tractors.



**OH 8004****HGV HUB AND DRUM SUPPORT LOW TRAILER**

Specially designed for dismantling or changing drums and hubs on low trailers of heavy trucks (tank carrier type).  
Reduces working time by up to 70%.  
Limits the risk of accidents (back injury, falling of the stirrup on the feet...etc).



Only 1 operator

**Specifications:**

- stroke: 200mm
- 4 swivelling wheels, 2 of which are braked
- dimensions: 550x300x700mm
- weight: 34Kg



Max. Kg  
**120**  
**2** WARRANTY

**OH 8001****HGV BRAKE CALIPER SUPPORT**

Specially designed for dismantling or changing brake calipers, bushings and drums on trucks, buses and industrial vehicles.  
Reduces working time by up to 70%.  
Limits the risk of accidents (back injury, fall of the stirrup on the feet, etc.)



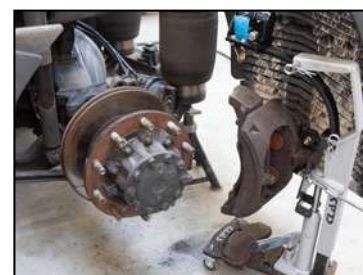
Only 1 operator



Flash to watch the video!

**Specifications:**

- stroke: 200mm
- 4 swivelling wheels, 2 of which are braked
- dimensions: 470x250x700mm
- weight: 35Kg



4 positions caliper grip:

- 1' (12h)
- 2' (10h/2h)
- 3' (9h/3h)
- 4' (Specific with the offset rod for Mercedes).

Max. Kg  
**40**  
**2** WARRANTY



# HEAVY DUTY BRAKING TRILOGY

Our complete range of heavy-duty hub and brake caliper supports has been specially designed to facilitate the daily work of operators.

The advantages are: reduction of musculoskeletal disorders and accidents during interventions, handling of tools by a single operator, easy extraction of the hub thanks to an effort in the axis of the spindle, saving of time and productivity, coverage of all the caliper positions.

## 1 Brake caliper extraction



OH 8003

## 2 Hub and brake disc extraction



OH 8010

## 3 Brake disc release



OH 8013

+



OH 8010

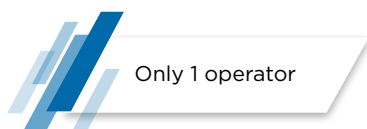
### OH 8003

#### BRAKE SUPPORT AND CALIPERS WIDE BASE HGV

Specially designed for dismantling or changing brake calipers, bushings and drums on trucks, buses and industrial vehicles.

Reduces working time by up to 70%.

Limits the risk of accidents (back injury, fall of the stirrup on the feet... etc).



Only 1 operator



Flash to  
watch the  
video!

#### Specifications:

- stroke: 200mm
- 4 swivelling wheels, 2 of which are braked
- dimensions : 550x300x700mm



4 positions caliper grip:

- 1' (12h)
- 2' (10h/2h)
- 3' (9h/3h)
- 4' (Specific with the offset rod for Mercedes).

### SA 8009

#### OPTION LOW SOCKET AND BRACKET

Spare part of OH 8003

Bottom connection of the optional swinging caliper. Multi-position caliper socket from 4h to 8h.



2  
WARRANTY



**FINANCING**

Consult your distributor!

Max. Kg  
40

2  
WARRANTY

**OH 8010****HUB/CALIPER AND BRAKE DRUMS SUPPORT**

Specially designed to accommodate the entire hub (hub, disc and caliper) when changing bearings on trucks, buses and industrial vehicles.

The assembly can be dismantled directly on the support, without effort, assisted by a winch for the removal of the bracket and disc.

Reduces working time by up to 70%.

Limits the risk of accidents (back injury, fall of the stirrup on the feet...).



Flash to  
watch the  
video!

**Specifications:**

- stroke: 200mm
- max winch load: 120kg
- 6 wheels including 2 braked castors
- dimensions: 550x300x700mm
- weight: 49Kg



Max. Kg  
**120**  
WARRANTY **2**

**OH 8013****BRAKE DISC EXTRACTION CYLINDERS**

Specially designed to separate the discs from the hub in record time when they are stuck by corrosion.

Reduces working time and secures the operation by avoiding the use of hammers, discers, cutting machines...

Limits the risk of accidents.



Flash to  
watch the  
video!

**Specifications:**

- 2 independent 4T jacks on flexible hose L.1500mm
- min length: 84mm
- max length: 125mm
- stroke 41mm
- Ø piston : 32mm
- foot pump max 700bar
- pump hoses length 220mm
- 4 wheels, 2 of which are braked swivel wheels
- dimensions: 470x300x500mm
- weight: 37kg



WARRANTY **2**

**OP 4505****23 PCS PNEUMATIC BRAKE CALIPER REWIND SET**

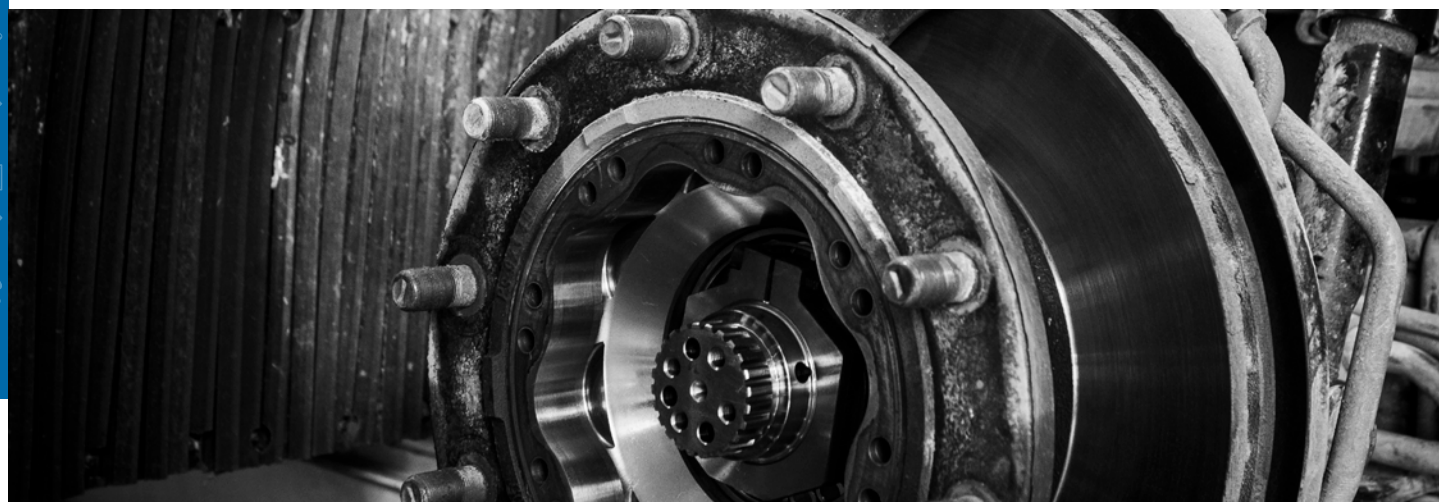
This tool allows the operator to push back the brake caliper pistons very simply and effortlessly thanks to the gun's hydraulic jack which pushes up to 150kg.  
The operating pressure is from 5 to 8bar.



This kit includes a pneumatic gun, the traditional adaptors and all the latest adaptors for:

- VW Passat (from 2005)
- Ford
- Iveco Daily
- BMW
- Mini/BMW
- Renault Laguna III/Scénic III
- Renault Master III

For left or right handed threaded pistons.  
Supplied in a box.

**OM 0180****BRAKE CALIPER SOCKET SET (18 PCS)**

Box specially designed to work on brake calipers and in particular on specific imprints (ex: Porche, VAG...).

**Contents:**

- 3/8" d. hex socket bits
  - H7 recesse length 45mm
  - H7 recesse length 65mm
  - H9 recesse length 23mm
  - H10 recesse length 12mm
  - H11 recesses length 73mm
- 3/8" sockets L.25mm: H7, H8 and H9
- 1/2" 5 pin sockets: 10, 12.5, 14 and 19mm
- gear lock sockets (7pins) 14 and 22mm
- gear lock sockets (10 pins) 9, 11.5, 15 and 20mm





# BRAKE FLUID DRAINING

## HU 1109

### PNEUMATIC BRAKE AND CLUTCH BLEEDER

For bleeding brakes and hydraulic clutches of all vehicles, can also bleed vehicles equipped with load-sensitive brake control and ABS (max. 1bar).



Self-contained air tank



Supplied with:

- 1 metal plug
- 2 brake oil recovery jerrycans

#### Specifications:

- pneumatic operation
- comes with antifoaming rubber membrane
- air reserve in the bottom part of the tank
- 5-litre capacity allows it to be used repeatedly
- fast-connector hose
- balanced carrying handle
- pressure control gauge
- plug storage rack
- compatible with DOT3/ DOT4/DOT5/DOT6 /Pentosin/LHM/LHS
- equipped with an air vent at the hose outlet to prevent air injection into the circuit



## HU 0700

### 12 BRAKE BLEEDER PLUG SET

Accessory of HU 1109/HU 1107/HU 1110/HU 1005/HU 1105



#### Contents:

- 2 conical plugs ranging from 30mm to 80mm
- 10 specific plugs

Alfa Romeo, Citroën, Ford, Opel, Peugeot, Seat, Skoda, Volkswagen, Cadillac, Chevrolet, Chrysler, Daewoo, Daihatsu, Dodge, Honda, Hyundai, Isuzu, Jaguar, Jeep, Kia, Lancia, Land Rover, Lexus, Mazda, Smart, Subaru, Suzuki, Toyota, Aston Martin, Bugatti, Maserati.

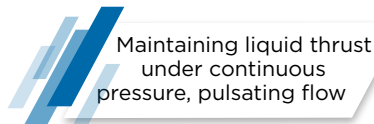




## HU 1102

### ELECTRIC BRAKE BLEEDER 5-20L 3.5bar

Automatic stop when the level in the can is too low.  
Automatic bleeding after canister change.  
Checks low pressure brake system for leaks.  
Suction function for expansion vessel, with graduated used liquid recovery canister (1.5L)



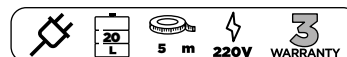
#### Specifications:

- 230V power supply (5m cord)
- equipped with an on/off switch
- equipped with a pressure regulator 0-3.5bar with maintenance of the thrust of the liquid in pulsating flow
- pressure gauge for pressure control
- suitable for clutches and brakes (compatible with ABS, EDS, ESP, SBC systems)
- capacity 5 to 20 litres, allowing several operations
- interchangeable canister: ensures compatibility of the DOT3/DOT4/DOT5/DOT6 liquid
- flexible L.3.5m
- dimensions: 850x400x330mm
- weight: 23kg



Flash to watch the video!

Supplied with metal plug Ø43mm



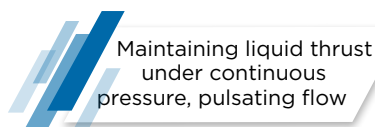
SA 8113 2 BRAKE OIL RECOVERY JERRYCANS

Spare part of HU 1003/HU 1004/HU 1005/HU 1105/HU 1025/HU 1109  
Accessory of HU 1101/HU 1102/HU 1103/HU 1104

## HU 1103

### ELECTRICAL BRAKE BLEEDER 30-60L 3.5bar

Automatic stop when the level in the can is too low.  
Automatic bleeding after canister change.  
Suction function for expansion vessel, with graduated used liquid recovery canister (1.5L)



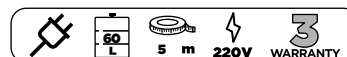
#### Specifications:

- 220V power supply (5m cord)
- equipped with an on/off switch
- equipped with a pressure regulator 0-3.5bar with continuous liquid thrust maintenance
- pressure gauge for pressure control
- suitable for clutches and brakes (compatible with ABS, EDS, ESP, SBC systems)
- capacity 30 to 60 litres, allowing several operations
- flow rate: 60l/h
- interchangeable barrel: ensures compatibility of DOT3/DOT4/DOT5/DOT6 liquid
- flexible L.3.5m
- dimensions: 920x450x560mm
- weight: 33kg

Recommended for Mercedes Actros/Atego equipped with HPS-1



Supplied with metal plug Ø43mm



**OP 0501****PNEUMATIC VACUUM BRAKE BLEEDER***Accessory of AC 4095*

Allows you empty the brake fluid reservoir and bleed the brake lines.



Single operator

Vacuum kit capacity 800ml  
Powered by compressed air

**OP 0053BL****PNEUMATIC VACUUM BRAKE BLEEDER**

Allows you empty the brake fluid reservoir and bleed the brake lines.

**B.LINE**

Used to vacuum out impurities:  
injector wells, plug wells, etc.



Bleed screw adapter

**OM 0501****SET OF 6 BRAKE/CLUTCH BLEED WRENCHES**

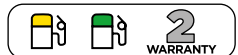
Specially designed for bleeding brake calipers, the key is equipped with a coupler with retaining gasket, ensuring optimum grip of the bleeding screw (even damaged) without any leakage.



Non-return valve for single operator purging

**Specifications:**

- wrenches 7, 8, 9, 10, 11 and 12mm
- SA2113: hose L.105cm

**HU 0550****METAL PRESSURE AND VACUUM PUMP (-1/+ 4bar)**

To test: advance vacuum curve pressure regulator for fuel, LPG, EGR valve (exhaust fumes) TURBO...



- turbo oversupply pressure testing
- fuel pressure regulator watertightness testing
- advance vacuum curve testing
- pressure relief valve testing
- watertightness testing for fuel injection pump LDA membrane
- EGR valve testing
- brake servo-unit membrane



SA8071: 360° rotating pressure gauge  
SA8081: set of 8 bits  
Supplied in a box



## OIL FILTER WRENCHES

## HU 2004

FILTER WRENCH 45-  
111mm + 3/8" + 1/2"  
D.-3/8" REDUCER



TN

## HU 2006

FILTER  
WRENCH  
122-155mm



Tighten/loosen



TN

## HU 0023

METAL STRAP WRENCH FOR IVECO/  
VOLVO/RENAULT OIL FILTER

- Ø min: 100mm
- Ø max: 110mm
- drive: 1/2"



TN

## HU 2024

DOUBLE-CHAIN FILTER  
WRENCH Ø60-160mm



TN

## OM 0315

OIL FILTER WRENCH Ø135mm  
18-SIDED



Applications: Man



TN

## HU 2236

FILTER WRENCH Ø107mm 18-SIDED



Models:  
Renault: Trafic, Master...



TN

## OM 0337

OIL FILTER WRENCH Ø107mm  
15-SIDED



Applications:  
Renault, Volvo, Iveco, Scania,  
Claas, Demag, Caterpillar, Perta



TN



**HU 1992****IVECO OIL FILTER WRENCH SET****Contents:**

- 91x15
- 96.5x15
- 108x15
- SA2069: 1/2"x3/8" reducer

**2**  
WARRANTY**HU 1999****30 MULTI-BRAND CAP OIL FILTER SET**

This oil filter wrench set lets you dismantle immersed filters as well as traditional screwed filters.



3/8" Drive  
1/2"-3/8" D. reducer included

Sockets available to retail customers

Renault, PSA, VAG, Opel, Mercedes, Fiat, Lancia,  
Alfa, Nissan, Honda, Mazda, Mitsubishi,...

**2**  
WARRANTY



## WASTE OIL DRAINERS

## HU 0079BL

TN

## 70L GREY WASTE OIL DRAINER

**Specifications:**

- capacity: 70l
- air pressure for oil discharge: 1 to 2 bar
- standard: tool plate+stand for scroll
- 4 wheels (2 swivel wheels)
- min height: 1005mm
- max height: 1610mm
- total container capacity: 620mm
- Ø tray: 420mm
- weight: 19kg



## HU 0180N

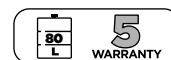
TN

## 80l WASTE OIL DRAINER

**Specifications:**

- capacity: 80l
- drain pressure: 0.5bar
- 4 wheels including 2 directional
- h. min.: 1200mm
- h. max.: 1795mm
- oil level indicator
- tray Ø: 520mm
- weight: 33kg

HU0180-1 : 1 x tank for 80l waste oil drainer  
SA0448 : 1 x funnel ø520mm + grid



## HU 0149N

TN

## 80l MIXED WASTE OIL DRAINER

This tool after vacuuming allows an autonomous emptying indoors as well as outdoors in the workshop.

**Specifications:**

- gravity draining
- vacuum draining
- air inlet pressure: 6 to 8bar
- Ø tray: 520mm
- antechamber capacity 9l
- air pressure for oil discharge: 0.5bar
- oil level indicator
- weight: 27,5kg
- h. min.: 1210mm
- h. max.: 1795mm

HU0149-1 : 1 x tank for 80l mixed waste oil drainer  
SA0448 : 1 x funnel ø520mm + grid

Supplied with flexible and rigid probes (shank Ø: 12.2mm)



## HU 0159N

TN

## 80l MIXED WASTE OIL DRAINER WITH BOWL

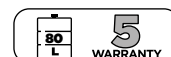
This tool after vacuuming allows an autonomous emptying indoors as well as outdoors in the workshop.

**Specifications:**

- transparent pre-chamber with level indicator
- 1.5m suction hose with valve and quick connect for probes
- gravity draining
- vacuum draining
- air inlet pressure: 6 to 8bar
- Ø tray: 520mm
- pre-chamber capacity: 9l
- air pressure for oil discharge: 0.5bar
- oil level indicator
- weight: 32,3kg
- h. min.: 1350mm
- h. max.: 1795mm

HU0159-1 : 1 x tank for 80l mixed waste oil drainer with bowl  
SA0448 : 1 x funnel ø520mm + grid

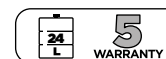
Supplied with flexible and rigid probes (shank Ø: 12.2mm)



TN

**HU 0620****PNEUMATIC OIL DISTRIBUTOR 24L****Specifications:**

- supply for tank discharge: 0.5bar
- level indicator
- trigger with holding in discharge position
- fixed filling funnel, with strainer

**HU 0631****FLUID EXTRACTOR/DISPENSER**

For motor oil, cooling fluid, brake fluid....  
Do not use with flammable liquids

**Specifications:**

- probe length: 1600mmx3
- Ø6-8-10mm
- manual pump
- pressure/vacuum inverter



TN

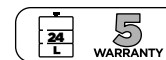
**HU 0139****24L SUCTION DRAINER**

This tool after vacuuming allows an autonomous emptying indoors as well as outdoors in the workshop.

**Specifications:**

- venturi design
- air inlet pressure: 6 to 8bar
- air pressure for oil discharge: 0.5bar
- oil level indicator

Supplied with flexible and rigid probes



TN

**HU 0033****65I HGV FLUID COLLECTION CONTAINER**

For HGV ground draining.  
For engine oil, gearboxes...



- equipped with a breakwater grid and anti-drain back
- dimensions: 250x700x500mm



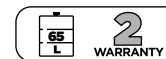
TN

**HU 0114****65I HGV PIT COLLECTOR**

For engine oil, gearboxes...



- equipped with a breakwater grid and anti-drain back
- drain valve underneath the tank
- waist width adjustment: 750mm mini, 1200mm maxi
- dimensions: 250x700x500mm



TN

## OIL SUMP REPAIRING

### HU 2050

#### OIL SUMP REPAIR KIT WITH PLUGS



This kit is designed for damaged oil sump threading repairs

##### Contents:

- HU2051: Set of 6 plugs+joints+ tap M13x1.25
- HU2052: Set of 6 plugs+joints+ tap M13x1.5
- HU2053: Set of 6 plugs+joints+ tap M15x1.5
- HU2054: Set of 6 plugs+joints+ tap M17x1.5
- HU2055: Set of 6 plugs+joints+ tap M20x1.5
- HU2056: Set of 6 plugs+joints+ tap M22x1.5

NO  
WARRANTY

### HU 2019

#### 13 BLOCK DRAIN PLUGS KIT

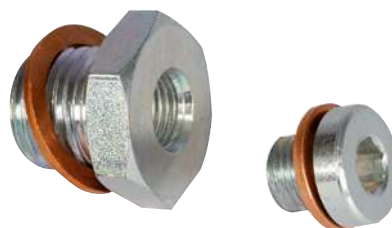
These plugs eliminate the problem of damaged oil sumps being tapped, as they replace the original plug without any other intervention.

The thread pitch is the same as the original one, but with a larger thread diameter.

Using these drain plugs does not require the thread to be restored, they should be directly mounted.

Each plug includes a second plug.

Once mounted, the first plug is left on the oil tank while the other plug will be used for the next draining.



##### Contents:

- SA2025: plug M10x125 PSA HDI
- SA2024: plug M12x150 Renault/Toyota/Nissan/Mercedes
- SA2023: (x2) plugs M14x125 PSA Diesel and HDI
- SA2022: (x3) plugs M14x150 VW/Audi/Ford/Opel/Mercedes/Fiat JTD
- SA2021: (x3) plugs M16x150 PSA/Renault/Volvo
- SA2020: plug M18x150 PSA/Renault/Volvo/Toyota/Mitsubishi
- SA2019: plug M20x150 Fiat/Alfa/Lancia
- SA2018: plug M22x150 PSA/Fiat
- SA2026: pouch of 10 seals Ø10
- SA2027: pouch of 10 seals Ø12
- SA2032: pouch of 5 rubber seals 1/4"
- 25 copper sealing joints: Ø10mm, 16x1.5
- 5 rubber joints Ø1/4"
- 20 copper joints Ø12mm, 16x1.5

NO  
WARRANTY

### HU 2002

#### 3/8" DRAIN BIT SET



Suitable for draining differentials, axles and gearboxes.

##### Contents:

- hex: 8-9-10-12-14-17mm
- 3-sided: 10mm
- XZN tamperproof: 16mm
- square: 7-8-10-11-12-13-14-5/16"-3/8"
- square female: 10mm

NO  
WARRANTY

## COOLING PLIERS

Pinch brakes hoses, fuel, heating, cooling, etc.



**Specifications:**

- 90° elbow

### OM 5105

#### 3 HOSE CLAMP SET

Pinch brakes hoses, fuel, heating, cooling, etc.

OM 5010	HOSE CLAMP Ø6-Ø19mm
OM 5020	HOSE CLAMP Ø12.5-Ø32mm
OM 5030	HOSE CLAMP Ø19-Ø57mm

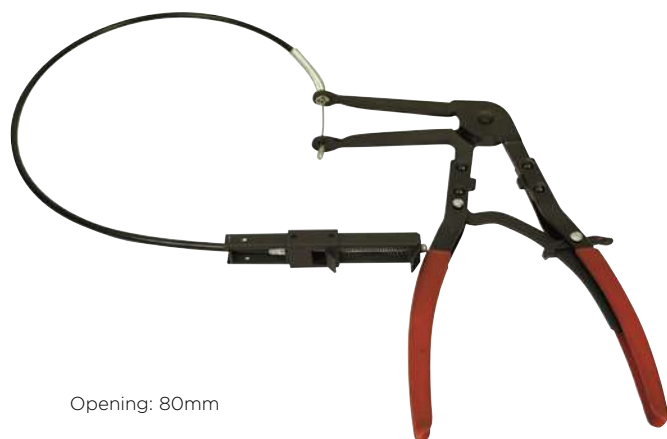
### OM 5104

#### SET OF 3 L-SHAPED HOSE CLAMP

OM 5014	L-SHAPED HOSE CLAMP Ø15mm
OM 5024	L-SHAPED HOSE CLAMP Ø22mm
OM 5044	L-SHAPED HOSE CLAMP Ø42mm



TN



Opening: 80mm

### OM 9390

#### UNIVERSAL CRIMPING PLIER FOR HGK

Tool remotely operatable by cable, for installing/removing the entire range of self-tightening elastic clamps Ø18 to 54mm, even in difficult places to reach.



### OM 9389

#### PLIER FOR CLAMPS WITH DOUBLE GRIP

This multidirectional plier facilitates the removal of self-tensioning clamps (water, fuel, air) which are not easy to reach.



**Specifications:**

- opening/closing of clamps horizontally or vertically without adjustment
- opening: 70mm
- non-slip handles



TN



## COOLING SYSTEM DIAGNOSTICS

### AC 1002

#### HGV COOLING LINE TESTER SET

Allows simple and quick control by pressurizing the cooling circuits by connecting instead of the expansion tank cap.



#### Contents:

- 5 metal plugs with quick coupling
- pressure regulator with relief valve
- control manometer 0 to 5bar
- vacuum filling kit
- 3 conical filling adapters
- filling pressure gauge -1 to 0bar
- filling pipes with strainer

**Applications:** Volvo, GM, Kenworth, Peterbilt, Freightliner

2  
WARRANTY

### OH 8006

#### BUSES RADIATOR CRANE



Specifically designed for dismantling radiators on buses.

#### Specifications:

- lifting height: 1890mm
- 4 wheels including 2 braked castors



#### FINANCING

Consult your distributor!

Max. T  
90  
2  
WARRANTY

**AC 4066**
**REFRACTOMETER**


For checking:

- cooling liquid 0 to -50°C
- battery liquid density: 1.1 to 1.4kg/l
- windshield washer liquid 0 to -40°C
- adBlue


**AC 3300**
**CO2 DETECTION KIT**


AC 3350 CO2 DETECTION FLUID

- checks for gas combustion in the radiator
- the test fluid changes colour if a leak is detected
- fast identification of defective head gasket

1- With the engine hot, take off the radiator cap or the expansion-tub cap and pour in the indicated dose of the tracking fluid.

2- Put the bulb on the tube and squeeze it several times. Any gas in the cooling system mixes with the tracking fluid. The blue tracking fluid changes color (turns yellow) if there is an internal combustion fault that forces CO2 into the cooling fluid. Conclusion: problem with the cylinder head gasket.


**CO 1013**
**300 ml COOLING SYSTEM CLEANER**

High performance curative cleaner for descaling and cleaning cooling circuits.

Removes deposits and limescale from pipes, hoses and radiators. Removes a protective layer against rust and corrosion. Renovates thermostat gaskets and relieves water pumps.

Also available in box of 24



Dilution: 6 to 7.5% (one bottle for 4 to 5L of coolant)

**CO 1012**
**300ml RADIATOR LEAK SEALER**

Plugs leaks in the coolant circuit, ensures the radiators and water pumps are leakproof and avoids overheating.

Allows almost the full circuit to be repaired. This product, which is composed of gel and aluminum flakes, permits you to carry out repairs by creating a patch on non-rigid parts (water container, hoses..) and the aluminum flakes repair the radiator by sealing the leak using the flakes.

Also available in box of 24



Exclusive gel formula with flakes of aluminum incorporated

Treats 4 to 8L of liquid.

## COOLING SYSTEM FILLING

### AC 1104

#### COOLING LINE FILLING DEVICE

Pressure loss system that forces rapid total refilling of the circuit.

Compressed air is used to empty the system.

Supplied with 4 rubber bushes Ø30-35-39.5-44mm (expanding) suitable for radiator caps from Ø31mm to 52mm.

The tool requires the system to have been previously emptied.



### HU 4029

#### CONNECTION DRAIN AND COOLING CIRCUIT FILLING SCANIA





# MECHANICS



**CHARGING SYSTEM**

**P.274**



**AIR CONDITIONING**

**P.278**



## BOOSTERS

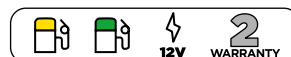
## OE 5051

## BOOSTER 12V 2500A

Compatible with all 12V vehicles

**Specifications:**

- starting current: 850A
- peak current: 2500A
- capacity: 22Ah
- cables: 25mm<sup>2</sup>
- integrated cigar lighter socket
- charging time: 4-8h
- oversized and insulated copper/brass clamps
- anti-shock ABS case
- battery: AGM
- weight: 10.6kg
- dimensions: 320x130x300mm



TN



## OE 5052

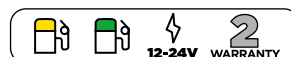
## BOOSTER 12-24V 6200A/3100A



Wheels + Handle

**Specifications:**

- starting current: 2400A-1200A
- peak current: 6200A-3100A
- capacity: 2x33Ah
- cables: 50mm<sup>2</sup>, L.165cm
- integrated cigar lighter socket
- charging time: 4-8h
- oversized and insulated copper/brass clamps
- anti-shock ABS case
- voltmeter digital charge indicator
- battery: AGM
- weight: 29kg
- dimensions: 410x280x550mm



TN

# CHARGING SYSTEM DIAGNOSTICS

## AC 5245

### 12/24V BATTERY TESTER

Instruction manual inside the device  
Supplied without a printer.



1800mm of cable  
Suitable for start &  
stop batteries

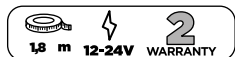
## AC 5244

### 12/24V BATTERY ELECTRICAL SYSTEM TESTER WITH DETACHABLE PRINTER

#### Specifications:

- for 12/24V SLI or AGM batteries
- option to select the main national standards of batteries: CCA-SAE-DIN-JIS-IEC-EN-CA
- allows to test: batteries, starters, grounding, alternators (compatible with intelligent alternators), voltmeter
- test report: results can be printed or transferred to a computer (via supplied USB cable)
- multilingual: FR, ENG, ESP, ITA, GER, NL, ROM, FIN, SWE
- paper 55mm width (SA5245 = 2 rolls)

SA 5245	2 PAPER ROLL SET	Spare part of AC 5244/SA 5244 Accessory of AC 5245
SA 5244	PRINTER	Spare part of AC 5244 Accessory of AC 5245





## OE 1224

## OVERLOAD CIRCUIT BREAKER 12-24V

This device protects the vehicle electronically from overload.

Protect the electronics, avoids reprogramming clock/radio...



Connect the two alligator clips to the battery. If the LED lights up, the device is connected correctly and is ready to use.

Visual and sound signal  
Connects directly to the battery terminals, no mounting direction

Max. clamping voltage 12V:

- 32.5V/308A (8-20µs)
- 25.2V/59.5A (10-1000µs)

Max. clamping voltage 24V:

- 59.0V/169A (8-20µs)
- 45.7V/33A (10-1000µs)



## OE 0164

## MEMORY SAVER OBDII CIGARETTE LIGHTER

Allows the vehicle to be supplied with power while the battery is disconnected to conserve memories (car radio code, electric seats, etc.).

Keeps, electronic data

The vehicle is powered from the OBDII socket.

Via a cigarette lighter socket, or an additional battery

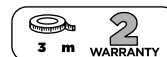
Equipped with a power supply indicator and reverse polarity protection

Memory backup box



## Specifications:

- cable length: 3m
- fuse 8A



## OE 3150

## DIGITAL VOLTMETER 6-12V

Conversion table of the values (volts) into a charge level (%) integrated in the housing for easy interpretation of the measured values.



## Specifications:

- measurement range: 4.5 to 19.99V
- digital display of measured values
- surge protection
- reverse polarity protection
- dimensions: L.120xW.70xH.18mm



## OE 0035BL

## LOAD TESTER (LED) FOR 12V BATTERIES AND ALTERNATORS

Allows charge level of batteries and 12V alternators to be read thanks to 3 colored LED indicators (red/yellow/green).

B.LINE





# BATTERY ACCESSORIES

**OH 8005**

## HGV BATTERY/CATALYTIC CRANE

Specially designed for dismantling and handling batteries and catalyser on trucks, buses and industrial vehicles.

Preserves the physical integrity of the operator



Security chain



Adjustable battery holder



Battery strap

### Specifications:

- Max. load: 90kg
- 4 wheels including 2 brake swivelling wheels
- lifting height: 1890mm

Max. Kg  
**90**  
WARRANTY **2**

## A/C DIAGNOSTICS

OE 5036

### INFRARED THERMOMETER -38°/520°

Reliable measurement thanks to high-precision laser aimer. Very practical, the infrared thermometer measures surface temperature requiring no contact, remotely and totally safely.



#### Specifications:

- temperature range: -38°C/520°C (-36.4°F/968°F)
- accuracy:  $\pm 2^{\circ}\text{C}$
- response time: 1s
- resolution: 0.1°C/0.1°F
- illuminance automatic stop after 15s
- automatic switch off after 60s if no action taken
- power source: 1.5V battery (x2)



AC 4223

### DIGITAL THERMOMETER



#### Specifications:

- digital display
- temperature range: -40° to 250°C
- stainless steel sensor
- automatic stop
- power supply: LR44 battery (included)
- accurate to:
  - $\pm 2\%$  (between -40°C and 200°C)
  - $\pm 3\%$  (between 200°C and 250°C)



AC 4224

### DIGITAL ELECTRONIC THERMOMETER



#### Specifications:

- digital display
- temperature range: -50° to 300°C
- stainless steel sensor
- pressure  $\pm 1^{\circ}\text{C}$
- battery power 1.5V AAA
- cable length: 900mm
- probe length (chromed part): 170mm
- cable + probe (with handle): 1200mm



**AC 1017****NITROGEN/HYDROGEN LEAK KIT (N2-H2) 50bar**

The tooling contained in the case is used to "pressurize" the refrigeration and air conditioning systems in order to "simulate", inside the systems, at which pressure it will have to operate.

By pressurizing the installation with technical hydrogenated nitrogen (at an appropriate pressure and therefore different depending on the refrigerants as indicated by the visible sectors on the manometer), the installer will have the certainty, in the event of leakage due to improperly made clampings, «cold» welds or manufacturing faults, that these faults will be indicated by a loss of nitrogen detected by the manometer provided for this purpose. The controlled installation will no longer encounter this type of problem.



Compatible with  
R134a and 1234yf gas



Compatible with small and large bottles

**Contents:**

- carrying case
- SA4062: pressure relief valve block with safety valve up to 50bar
- SA4060: insulation pressure gauge + flexible 100cm
- SA4063: reducer for 1kg bottle
- SA1090: hydrogenated nitrogen bottle (N2-H2)1kg
- SA4061: 160cm piping system
- SA4029: high pressure connection
- SA4052: gas-specific high pressure fitting R1234yf

AC 4028	AIR CONDITIONING ADAPTER BMW/VOLVO
SA 1090	1kg NITRO-TRACE CYLINDER (N2-H2)
SA 4052	HIGH PRESSURE COUPLER FOR GAS R1234yf
SA 4054	LOW PRESSURE COUPLER FOR GAS R1234yf
AC 4036	AIR CONDITIONING LOW PRESSURE COUPLER FORD FIESTA
AC 4037	AIR CONDITIONING HIGH PRESSURE COUPLER FORD FIESTA

**AC 7495****UNIVERSAL ELECTRONIC LEAK DETECTOR  
R134a/1234YF/HYDROGEN**

This leak detector with a sensor designed to detect the smallest concentrations of hydrogen nitrogen and other gases. Compatible with Hydrogen Nitrogen (N2-H2), R134a, R1234YF, R404-A, R410-A, R407-C, R22, Freon...

When a concentration is detected, an audible alarm is emitted and the display indicates the size of the leak (from 1 to 7).

**Specifications:**

- sensitivity adjustable on 3 levels
- automatic calibration
- sensor type: Semiconductor
- integrated fan
- power supply: 4 x AA alkaline batteries
- battery life: 4-6h continuously
- low battery indicator
- preheating time 45 s
- probe length: 40cm
- delivered in a suitcase with batteries



Multi-gas, self-  
calibration





## AC 5028

### ELECTRONIC STETHOSCOPE LEAK DETECTOR

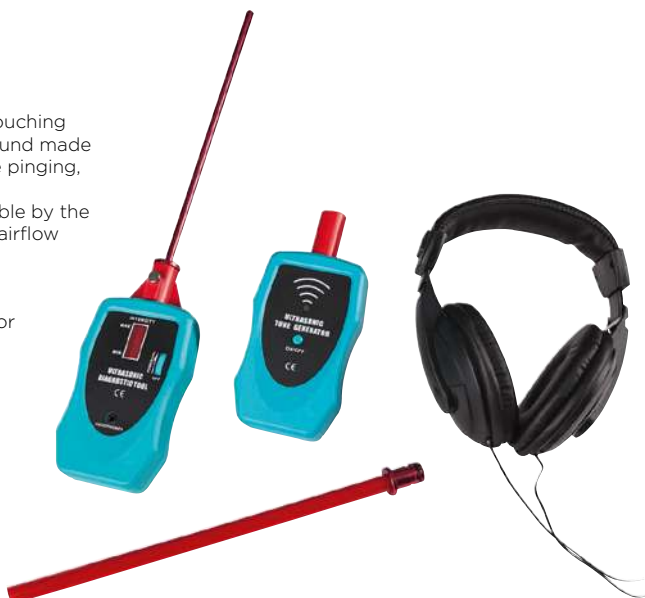
The electronic stethoscope allows you, simply by touching with the tip during static testing, to transmit the sound made by the target through headphones to locate engine pinging, bearing noise, slapping, etc. It also lets you detect air leaks normally imperceptible by the human ear by making the ultrasounds made by an airflow audible.

#### Specifications:

- can be operated with 2x9V batteries (6f22 type) or equivalent
- response frequency: 36000Hz to 44000Hz
- operating temperature: 0°C to 40°C
- storage temperature: -10°C to 50°C
- weight: amplifier 183g/transmitter 156g

#### Contents:

- amplifier 176x84x35mm
- ultrasonic transmitter 170x84x36mm
- headphones
- alu stethoscope probe 250mm
- plastic amplifier tube 270mm
- carrying case with foam



This kit allows you to visually check the condition of the air conditioning circuit.

Controls the quality of the gas according to its clarity, allows to detect the presence of tracer, stop leak, impurities related to the failure of the circuit, or even the compressor. Our kit is also equipped with a moisture analyzer by changing the color as the gas passes through.



## AC 1018

### DETECTION KIT / AIR CONDITIONING IMPURITIES FILTRATION SYSTEM R134a



## AC 1019

### DETECTION KIT / AIR CONDITIONING IMPURITIES FILTRATION SYSTEM R1234YF



## SA 6500

### PH NEUTRAL AEROSOL LEAK DETECTOR

Accessory of AC 1014



## SA 1092

### 2.2kg NITRO-TRACE CYLINDER (N2-H2)

Accessory of AC 1014/AC 1015/AC 1016/  
AC 1017/AC 1023



## SA 1090

### 1kg NITRO-TRACE CYLINDER (N2-H2)

Spare part of AC 1017/AC 1014/AC 1015/AC 1016/  
AC 1023



**AC 4052****AIR CONDITIONING R134a CONTROL SET BY TRACER****Contents:**

- SA1002: UV Glasses
- OE0396: mini rechargeable inspection lamp 3W COB+1SMD
- CO4077: 12 syringe tracer pack 7,5ml for R134a gas



CO 4077

12 SYRINGE TRACER PACK 7,5ml FOR R134aa GAS

**AC 4027****AIR CONDITIONING ADAPTER RENAULT**

Spare part of AC 4041/AC 4042/AC 4040  
Accessory of AC 4055

**AC 4028****AIR CONDITIONING ADAPTER BMW/VOLVO**

Accessory of AC 1012/AC 1014/AC 1015/AC 1016

**AC 4029****2 COUPLING 1/4" HIGH & LOW PRESSURE SET**

## AC 4053

### AIR CONDITIONING R1234yf CONTROL SET BY TRACER



#### Contents:

- SA1002: UV Glasses
- OE0396: mini rechargeable inspection lamp 3W COB+1SMD
- CO4078: 12 syringe tracer pack 7,5ml for R1234 gas



CO 4078 12 SYRINGE TRACER PACK 7,5ml FOR R1234 GAS



## CO 4073

### BOTTLE UNIVERSAL ADAPTER 1234YF HP



## CO 4072

### BOTTLE UNIVERSAL ADAPTER 1234YF LP



## SA 4052

### HIGH PRESSURE COUPLER FOR GAS R1234yf

Spare part of AC 1017

Accessory of AC 1012/AC 1014/AC 1015/AC 1016



This specific 3/8"coupler 3/8", according to the standard SAE J639, allows to refill or to detect an aircon gas leak R1234yf. It can be connected to the vehicle for maintenance purposes with great simplicity thanks to the quick-locking function.



## SA 4054

### LOW PRESSURE COUPLER FOR GAS R1234yf

Spare part of AC 1012/AC 1014/AC 1015/AC 1016

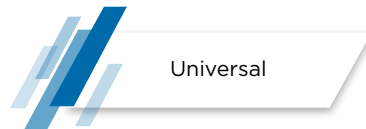


This specific 3/8"coupler 3/8", according to the standard SAE J639, allows to refill or to detect an aircon gas leak R1234YF. It can be connected to the vehicle for maintenance purposes with great simplicity thanks to the quick-locking function.





TN

**CO 4068****UNIVERSAL AIR CONDITIONING TRACER BOTTLE 250ml**

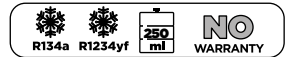
Universal



Compatible with all gases: R12, R134, R1234YF

- integrated measuring scale
- graduation dosing unit: 5ml
- graduation bottle: 25ml

Not suitable for hybrid vehicles (see CO4069)

**CO 4069****HYBRID VEHICLES AIR CONDITIONING TRACER BOTTLE 250ml**

Integrated graduated dosing unit



Specially developed for air conditioning systems with electric compressors (hybrid vehicles...)

- integrated graduated dosing unit
- dosing scale: 5ml
- graduation bottle: 25ml

**CO 4079****12 SYRINGE TRACER PACK 7,5ml FOR HYBRID VEHICLE**

Specially developed for air conditioning systems with electric compressors (hybrid vehicles...).

**SA 1002****UV GLASSES***Spare part of AC 4052/AC 4053*EN 166: 2001  
EN 170: 2003**OE 0396****UV MINI RECHARGEABLE INSPECTION LAMP****Specifications:**

- aluminum body
- 2 magnets + belt clip
- double illumination: to the front + at the top
- LED UV
- UV wavelength: 390-400nm
- overheating and overloading protection
- autonomous operation: 3.5h
- charging time: 3-4h
- charge indicator
- battery: 3.6V 2200mAh
- 220V mains charger
- dimensions: L.111xW.27xH.24mm



TN

# A/C MAINTENANCE

## AC 1023

### AIR CONDITIONING WASHING KIT

An economical way to remove contaminants and scale from air conditioning system components.

The process thoroughly cleans the circuit by removing oil, contaminants, refrigerant residues and moisture from the circuit. Essential intervention, when replacing a component of the circuit or simply opening the circuit, to quickly and efficiently remove refrigerant oil and debris when replacing a component (e.g. compressor).  
Easy to use: simply fill the decontamination solution cartridge, pressurize with the nitrogen cartridge and purge each component. The cleaning solution is a highly evaporating product, so there is no risk of leaving moisture in the circuit.  
The drying of the circuit is done naturally with the hydrogenated nitrogen gas used.  
2 washes with 500ml will be possible.



## CO 1070

### LIQUID CANISTER WASHING AIR CONDITIONING 5L

Spare part of AC 1023



Approximately 20 washes



**SA 8989****PAIR OF ULTRANITRIL GLOVES FOR AIR CONDITIONING MAINTENANCE IN388 EN374**

Accessory of AC 1014/AC 1015/AC 1016/AC 1017

**NO**  
WARRANTY**CO 4065****AIR CONDITIONING LEAK STOP FOR R134a 30ml**

Allows plugging micro-leaks in metal parts, hoses and joints.  
Saves time on hard-to-access leaks.

Also available in box of 35

**NO**  
WARRANTY
**CO 4070****AIR CONDITIONING LEAK STOP FOR R1234yf**

Allows plugging micro-leaks in metal parts, hoses and joints.  
Saves time on hard-to-access leaks.

**NO**  
WARRANTY
**CO 4074****AIR CONDITIONING TRACER SPRAY CLEANER 400ml**

Allows to remove the traces left by the tracer in the engine enclosure.  
Facilitates the detection of a new leak.

**NO**  
WARRANTY
**CO 1063****VIRUCIDE AIR CONDITIONING PERCUTABLE CLEANER 125ml****NEW**

Specially designed to sanitize the cabin by disinfecting and deodorizing aircon systems.  
Easy to use thanks to the diffuser.



Allows you to sanitise, disinfect and deodorise the ventilation systems of light commercial vehicles.

This "One shot" procedure guarantees a quick and efficient treatment.

Virucide: EN 14476+A2 in 30 minutes on all viruses (including enveloped viruses in 10 minutes: H1N1 and coronavirus, adenovirus, norovirus and rotavirus), in dirty conditions.

**Specifications:**

- bactericidal standard EN 1276 and EN 13697
- fungicidal standard EN 1650 and EN 13697
- neutralizes odours
- physical state: aerosol
- vapour pressure (50°C): higher than 300 kPa (3 bar).
- density: < 1
- soluble
- UFI: XWAW-EDMC-9VOD-AN2X
- fragrance menthol


**NO**  
WARRANTY
**CO 1019****AIR CONDITIONING CIRCUIT CLEANER 400ml**

Cleans air-conditioning circuits and eliminates bacteria/germs. Enough to clean the system approx. 3 times.



Antibacterial/  
deodorizing

The product is suitable for treating the air conditioning ducts by removing the bacteria, mould and impurities which are found there.  
It is easy to use and is sprayed out using the air vents.  
You will once again be able to operate your air conditioning system after 15 minutes.

Also available in box of 12


**NO**  
WARRANTY





PAG lubricant. All gas compatible.  
For mechanical and electric Sanden  
compressors (hybrid vehicles).

**NEW**

**CO 4081**

UNIVERSAL AIR CONDITIONING  
LUBRICANT 1L PAG



**CO 4099**

UNIVERSAL AIR CONDITIONING  
LUBRICANT POE 80 250ml



TN



R134a  
PAG



R134a  
POE

TN

**CO 5003**

AIR CONDITIONING LUBRICANT  
PAG 46 250ml - R134a

**CO 4093**

AIR CONDITIONING LUBRICANT  
PAG 46 1L - R134a

**NEW**

**CO 5004**

AIR CONDITIONING LUBRICANT  
PAG 100 250ml - R134a

**CO 4094**

AIR CONDITIONING LUBRICANT  
PAG 100 1L - R134a

**CO 4095**

AIR CONDITIONING LUBRICANT  
PAG 150 1L - R134a



**CO 5001**

AIR CONDITIONING LUBRICANT  
POE 68 250ml - R134a

**CO 4098**

AIR CONDITIONING LUBRICANT  
POE 68 1L - R134a

**CO 5002**

AIR CONDITIONING LUBRICANT  
POE 100 250ml - R134a



R1234yf



**NEW**

**CO 4096**

AIR CONDITIONING LUBRICANT  
PAG 46 250ml - R1234YF

**CO 4097**

AIR CONDITIONING LUBRICANT  
PAG 100 250ml - R1234YF



TN

**AC 4034****VALVE/CONNECTOR/PLUG AIR  
CONDITIONING MAINTENANCE SET**

Set of connectors, plugs and valves  
for all basic maintenance of R134a air  
conditioning systems.



Components available at retail.

**AC 4054****AIR CONDITIONING MAINTENANCE  
KIT R1234YF****Contents:**

- CO4082x4: 20 valve core 19.0x5,12mm R1234yf
- CO4083: 5 valve core 21,8x7,8mm R1234yf
- CO4084: 5 valve core 22,1x9,8mm R1234yf
- CO4085: 5 valve core 21,5,0x7,8mm R1234yf
- CO4086: 5 valve core 20,0x7mm R1234yf
- CO4092: 5 valve core 27,5x7,5mm
- CO4087: 5 plugs M8x1,0 short R1234yf
- CO4088: 5 plugs M8x1,0 long R1234yf
- CO4089: 5 plugs M9x1,0 long R1234yf
- CO4090: 5 plugs M10x0,75 R1234yf
- CO4091: 5 plugs M10x1,25 R1234yf
- AC4048: R12/R134a valve core remover



AC 4024

AIR CONDITIONING MAINTENANCE TOOL SET FOR FRENCH VEHICLES (214 PCS)

Set of seals, plugs and valves for all basic maintenance of air conditioning systems.



Components available at retail.

x10	x10	x10	x10	x10	x10	x10	x10	x10	x10
CD 4021 8.6x1.78mm	CD 4021 8.6x1.78mm	CD 4021 8.6x1.78mm	CD 4021 8.6x1.78mm	CD 4021 8.6x1.78mm	CD 4021 8.6x1.78mm	CD 4021 8.6x1.78mm	CD 4021 8.6x1.78mm	CD 4021 8.6x1.78mm	CD 4021 8.6x1.78mm
x10	x5	x5	x5	x5	x5	x5	x5	x5	x5
CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm
x5	x5	x5	x5	x5	x5	x5	x5	x5	x5
CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm
x5	x5	x5	x5	x5	x5	x5	x5	x5	x5
CD 4029 2.0x1.5mm	CD 4029 2.0x1.5mm	CD 4029 2.0x1.5mm	CD 4029 2.0x1.5mm	CD 4029 2.0x1.5mm	CD 4029 2.0x1.5mm	CD 4029 2.0x1.5mm	CD 4029 2.0x1.5mm	CD 4029 2.0x1.5mm	CD 4029 2.0x1.5mm
x5	x5	x5	x5	x5	x5	x5	x5	x5	x5
CD 4029 1.0x1.0mm	CD 4029 1.0x1.0mm	CD 4029 1.0x1.0mm	CD 4029 1.0x1.0mm	CD 4029 1.0x1.0mm	CD 4029 1.0x1.0mm	CD 4029 1.0x1.0mm	CD 4029 1.0x1.0mm	CD 4029 1.0x1.0mm	CD 4029 1.0x1.0mm



AC 4025

AIR CONDITIONING MAINTENANCE SET FOR GERMAN VEHICLES (171 PCS)

Set of seals, plugs and valves for all basic maintenance of air conditioning systems.



Components available at retail.

x10	x10	x10	x10	x10	x10	x10
CD 4021 8.6x1.78mm	CD 4021 8.6x1.78mm	CD 4021 8.6x1.78mm	CD 4021 8.6x1.78mm	CD 4021 8.6x1.78mm	CD 4021 8.6x1.78mm	CD 4021 8.6x1.78mm
x10	x5	x5	x5	x5	x5	x5
CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm
x5	x5	x5	x5	x5	x5	x5
CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm	CD 4024 10.2x2.5x3.5mm
x5	x5	x5	x5	x5	x5	x5
CD 4029 2.0x1.5mm	CD 4029 2.0x1.5mm	CD 4029 2.0x1.5mm	CD 4029 2.0x1.5mm	CD 4029 2.0x1.5mm	CD 4029 2.0x1.5mm	CD 4029 2.0x1.5mm
x5	x5	x5	x5	x5	x5	x5
CD 4029 1.0x1.0mm	CD 4029 1.0x1.0mm	CD 4029 1.0x1.0mm	CD 4029 1.0x1.0mm	CD 4029 1.0x1.0mm	CD 4029 1.0x1.0mm	CD 4029 1.0x1.0mm





TN


























AC 4026

AIR CONDITIONING MAINTENANCE SET  
FOR ITALIAN VEHICLES (178 PCS)

Set of seals, plugs and valves for all basic  
maintenance of air conditioning systems.



Components available at retail.

 CD 4021 8.4x1.78mm	 CD 4014 8.4x1.78mm	 CD 4025 8.4x1.78mm	 CD 4047 8.4x1.78mm	 CD 4051 7.2x1.78mm	 CD 4013 8.2x1.78mm	 CD 4022 10.2x1.78mm	 CD 4032 14x1.78mm	 CD 4034 17.2x1.78mm
 CD 4011 10.2x2.4mm	 CD 4015 18.2x2.4mm	 CD 4048 18.2x2.4mm	 CD 4018 21.2x2.4mm	 CD 4056 21.2x2.4mm	 CD 4002 21.2x2.4mm	 CD 4007 21.2x2.4mm		
 CD 4042 8.2x1.78mm	 CD 4043 10.2x1.78mm	 CD 4044 8.2x1.78mm	 CD 4046 10.2x1.78mm	 CD 4019 10.2x1.78mm	 CD 4018 20.2mm			
 CD 4036 R12 system 1/8"	 CD 4008 1.5mm	 CD 4009 1.5mm						

NO  
WARRANTY

AC 4032

AIR CONDITIONING MAINTENANCE SET  
FOR ASIAN VEHICLES (241 PCS)

Set of seals, plugs and valves for all basic  
maintenance of air conditioning systems.



Components available at retail.

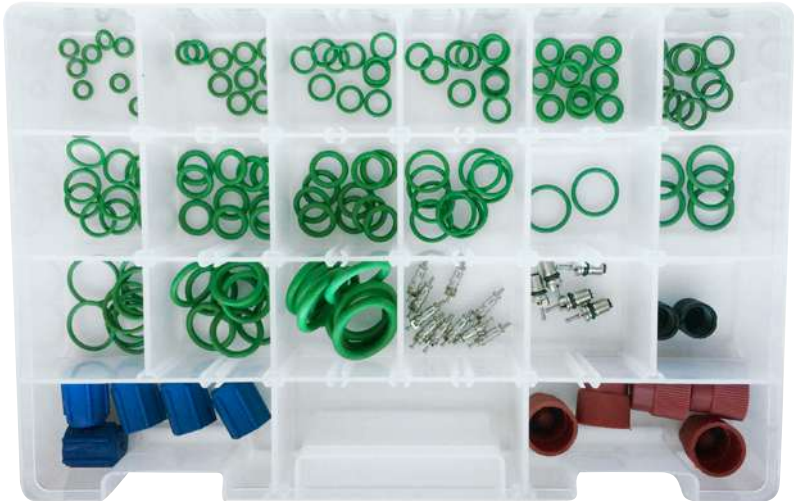
 CD 4021 8.4x1.78mm	 CD 4012 8.2x1.78mm	 CD 4019 8.4x1.78mm	 CD 4035 8.4x1.78mm	 CD 4047 8.4x1.78mm	 CD 4021 7.2x1.78mm	 CD 4022 10.2x1.78mm	 CD 4011 10.2x2.4mm	 CD 4013 10.2x2.4mm	 CD 4034 17.2x1.78mm
 CD 4022 11.2x1.78mm	 CD 4022 14x1.78mm	 CD 4018 18.2x2.4mm	 CD 4034 17.2x1.78mm	 CD 4041 8.4x1.78mm	 CD 4019 10.2x1.78mm	 CD 4040 18.2x2.4mm	 CD 4044 21.2x2.4mm	 CD 4014 21.2x2.4mm	
 CD 4027 14x1.78mm	 CD 4036 14x1.78mm	 CD 4025 14x1.78mm	 CD 4034 14x1.78mm	 CD 4056 14x1.78mm	 CD 4027 18.2x2.4mm	 CD 4041 18mm	 CD 4040 20mm	 CD 4043 20x1.78mm	
 CD 4036 R12 system 1/8"	 CD 4008 1.5mm	 CD 4009 1.5mm							

NO  
WARRANTY

AC 4033

AIR CONDITIONING MAINTENANCE KIT FOR US VEHICLES (164 PCS)

Set of seals, plugs and valves for all basic maintenance of air conditioning systems.



x10	x10	x10	x10	x10	x10
001 4033 8.25" O.D. 1.78"	002 4033 8.25" O.D. 1.78"	003 4033 8.25" O.D. 1.78"	004 4033 8.25" O.D. 1.78"	005 4033 8.25" O.D. 1.78"	006 4033 8.25" O.D. 1.78"
x10	x10	x10	x10	x10	x10
007 4033 8.25" O.D. 1.78"	008 4033 8.25" O.D. 1.78"	009 4033 8.25" O.D. 1.78"	010 4033 8.25" O.D. 1.78"	011 4033 8.25" O.D. 1.78"	012 4033 8.25" O.D. 1.78"
x10	x10	x10	x10	x5	x5
013 4033 8.25" O.D. 1.78"	014 4033 8.25" O.D. 1.78"	015 4033 8.25" O.D. 1.78"	016 4033 8.25" O.D. 1.78"	017 4033 8.25" O.D. 1.78"	018 4033 8.25" O.D. 1.78"
x5				x5	
					019 4033 8.25" O.D. 1.78"

Components available at retail.

NO WARRANTY



AC 4008

SPECIAL AIR CONDITIONING JOINT SET

Contents:

- 20 seals 7/32"x1/16"
- 20 seals 1/4"x1/16"
- 20 seals 6.8x1.9
- 20 seals 5/16"x1/16"
- 20 seals 7.8x1.9
- 20 seals 8x2
- 20 seals 8.8x1.9
- 15 seals 7/16"x1/16"
- 15 seals 7/16"x3/32"
- 15 seals 11x2
- 15 seals 12x2
- 10 seals 13.9x1.8
- 10 seals 9/16"x3/32"
- 10 seals 14x2
- 10 seals 15x2
- 10 seals 17x2
- 10 seals 11/16"x1/16"
- 10 seals 11/16"x1/8"



NO WARRANTY



**AC 4056****O-RING STANDARD KIT****Contents:**

- 15 O-rings 7,65x1,76mm
- 15 O-rings 14x1,78mm
- 15 O-rings 10,82x1,78mm
- 15 O-rings 17,17x1,78mm
- 15 O-rings 10,3x2,5mm
- 15 O-rings 6,34x2,5mm
- 15 O-rings 9,3x1,78mm
- 15 O-rings 4,89x1,53mm
- 15 O-rings 20,4x3,5mm
- 15 O-rings 19,18x2,46mm
- 15 O-rings 20x2,5mm
- 15 O-rings 8x2mm
- 15 O-rings 4,5x1,5mm
- 15 O-rings 8,92x1,5mm
- 15 O-rings 6,8x1,78mm
- 15 O-rings 15x3,5mm
- 15 O-rings 9x2,5mm
- 15 O-rings 6,6x6,51mm
- 15 O-rings 6,3x2,5mm
- 15 O-rings 6,5x2mm
- 15 O-rings 7,5x1,65mm
- 15 O-rings 19x2mm
- 15 O-rings 18,5x2,65mm
- 15 O-rings 7x2mm
- 15 O-rings 4,4x1,78mm
- 15 O-rings 21,5x3,5mm
- 15 O-rings 6,8x1,78mm
- 15 O-rings 20x2,5mm
- 15 O-rings 4,4x1,78mm

**NO**  
WARRANTY**AC 4057****AIR CONDITIONING VALVE CORE KIT****Contents:**

- 20 valve core 19.0x5.12mm
- 10 valve core 21.5x7.8mm
- 5 valve core 20.0x7.0mm
- 5 valve core 18.7x6.0mm
- 5 valve core 21.8x8.0mm
- 5 valve core 22.1x9.8mm
- 5 valve core 18.35x5.1mm
- 5 valve core 27.15x7.8mm
- 5 valve core 18.5x6.5mm
- 5 valve core 19.0x5.12mm - HFO1234yf
- 3 valve core 21.8x8.0mm - HFO1234yf
- 3 valve core 22.1x9.8mm - HFO1234yf

**NO**  
WARRANTY



TN

### AC 4021

#### 4 COMPARTMENTS ORGANIZER FOR AIR CONDITIONING MAINTENANCE BOX

Accessory of AC 4024/AC 4025/AC 4026/AC 4032/AC 4033/AC 4034

Ideal for grouping aircon maintenance sets.  
Can accommodate up to 4 sets.



NO  
WARRANTY



### AC 4229

#### AIR CONDITIONING/FUEL DISCONNECTION KIT

7 piece disconnection set specific to air conditioning and fuel hoses quick connectors.

NEW



#### Contents:

- 7 pieces for pipes Ø 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8"

2  
WARRANTY

### AC 4228

#### 4 COUPLING PUSH BUTTON SET



Dimensions 3/8", 1/2", 5/8", 3/4"

NO  
WARRANTY

### AC 4048

#### R12/R134a VALVE CORE REMOVER



R134a  
2  
WARRANTY

# MECHANICS



**STEERING &  
SUSPENSION**

**P.294**



**SILENT BLOCK**

**P.304**





# STEERING TIE RODS

TN

OM 9330

DOUBLE DRIVE TIE ROD MASTER WRENCH



This wrench is made to install and remove ball joints with no need to remove the steering rack. It is made up of two reversible serrated drives for perfect removal meaning that it is not necessary to pay attention to the direction in which the tool is positioned.

It can be used with traditional 1/2" D. ratchets and extensions. Thanks to its capacity range (30 to 40mm), it is suitable for all types of cars and LCVs.

2  
WARRANTY

TN

OM 9175

TIE-ROD ASSEMBLER/REMOVER Ø30-Ø45mm  
WITH INTERCHANGEABLE HEADS 4PCS

Allows the quick and professional installation and removal of axial steering rack from 30 to 45mm. The heads consist of a cage with three rollers made of treated steel. The rotation of the tool causes the rollers to lock themselves between the tool body and the ball joint, allowing the axial ball joint to be screwed in and out without damaging it. Compatible with round, hexagonal or octagonal racks.



Head equipped with a  
retaining screw  
3 in 1

- Specifications:**
- Ø head 30-35mm: 72mm
  - Ø head 35-40mm: 78mm
  - head Ø40-45mm: 90mm
  - the head is retained in place using screws for greater security
  - 1/2" drive + 32mm hexagonal for greater force
  - length including head: 410mm (Hollow)
  - weight: 2kg

SA 9175	HEAD Ø30-35mm	Spare part of OM 9175 Accessory of SA 9176/SA 9177
SA 9176	HEAD Ø35-40mm	Spare part of OM 9175 Accessory of SA 9175/SA 9177
SA 9177	HEAD Ø40-45mm	Spare part of OM 9175 Accessory of SA 9176/SA 9175

NO  
WARRANTY



# STEERING & SUSPENSION BALL JOINT

## OM 2510BL

JOINT PULLER SET Ø23-Ø34mm (3 PCS)



**B.LINE**



Ø34 H.63mm  
Ø28 H.55mm  
Ø23 H.55mm

OM 2501BL	BALL JOINT PULLER Ø23mm	Spare part of OM 2510BL
OM 2502BL	BALL JOINT PULLER Ø28mm	Spare part of OM 2510BL
OM 2503BL	BALL JOINT PULLER Ø34mm	Spare part of OM 2510BL

**2**  
WARRANTY

## OM 2600BL

BALL JOINT SEPARATOR  
Ø18mm

**B.LINE**



### Specifications:

- to remove rod ends
- suitable for most light vehicles-
- width opening: 20-50mm
- drive profile: 19mm (removal), 22mm (height adjustment)

**2**  
WARRANTY

## OH 5020

HYDRAULIC BALL JOINT  
PULLER KIT Ø30-34-40mm

8T force



Max. T  
**8**  
WARRANTY

**OM 0349**

**BALL JOINT PULLER Ø35mm**



Suitable for Mercedes Sprinter and VW LT



**OM 0344**

**BENZ ACTROS PITMAN ARM PULLER Ø42mm**



Suitable for Mercedes Actros et Man 414



**OM 2521**

**BALL JOINT ASSEMBLY/ DISASSEMBLY SET**

Especially designed to remove suspension ball joints.



**Contents:**

- A. receiver socket 55x69x76mm
- B. receiver socket 46x57.2x63.5mm
- C. receiver socket 46x45x50.8mm
- D. installation adapter 28.6x13.3x76.2mm
- E. removal adapter 28.5x23.9x76.2mm
- F. hex drive screw 22 total length 235mm Ø22x3mm equipped with a push adapter
- G. installation cup adapter 20x47.7mmx56.8mm
- H. swivel press L 222mm I 130mm (useful height 155mm depth 45mm)
- I. receiver socket 60.25x51x57.1mm
- J. installation cup 93.8x44.4x50.8mm



**OM 3615**

**10T UNIVERSAL BALL JOINT/ SILENT-BLOCK REMOVER**

Accessory of OM 2511/OM 2512/OM 9387

Supplied with universal rings

Compatible with BMW E36



**OM 4532**

**EPL IMPACT SOCKET 32mm 3/4" L.50mm MERCEDES**



**OM 4533**

**EPL IMPACT SOCKET 32mm 3/4" L.90mm MERCEDES**



**OP 1480****PNEUMATIC CHISEL TOOLS**

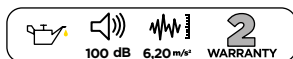
Chisel set for an easier removal of corroded, seized or crimped parts.

**Contents:**

- SA1480: chipping/chisel hammer
- SA1481: adapter for 1/2" D. impact sockets
- SA1482: adapter for Ø38-63-74mm blocks
- SA1483: circular shaped block Ø38mm
- SA1484: rounded hollow block Ø63mm
- SA1485: circular shaped block Ø74mm
- SA1486: circular shaped block Ø25mm
- SA1487: rounded hollow block Ø25mm
- SA1488: 10pcs O-rings

**Specifications:**

- capacity: 2200bpm
- operating pressure: 5 to 8bar
- consumption: 114l/min
- noise level 100dB



TN

**OM 7820****STEERING GEARBOX PULLER**

Opening Ø60mm  
H. 200mm



TN

**OH 0579****HYDRAULIC PULLER FRONT AXLE SPACER  
MERCEDES/MAN**

TN



**OH 0011****HYDRAULIC PUMP 24V 0-40bar**

For brake bleed, clutch system and hydraulic gearshift control HPS2, as well as the system with the new compensation tank. Pressure regulator 0-4bar.

**OH 0017****HYDRAULIC CONNECTION KIT VOLVO/SCANIA/RENAULT**

Accessory of OH 0011

**OH 0019****HYDRAULIC CONNECTION KIT MAN**

Accessory of OH 0011

**OH 0018****HYDRAULIC CONNECTION KIT IVECO**

Accessory of OH 0011

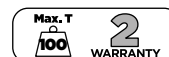
**OH 0570****SWIVEL PRESS 100T+PUNCHES**

Quick three-dimensional adjustment allowing use directly on vehicles.

**Contents:**

- 180° swivelling press on mobile trolley with handling handle
- hydropneumatic pump 700bar suitable for body repair/lifting/extraction hydraulic rams
- flexible hose L. 200cm
- Punches:
  - Ø21,5x150mm
  - Ø24,5x150mm
  - Ø29x120mm
  - Ø29x220mm
  - Ø35x120mm
  - Ø39x150mm
  - Ø39x220mm
- MERCEDES ACTROS-SK-0404 ring
- reduction washer 35/25mm
- reduction washer 70/65mm

Inner press frame dimensions:  
250x600mm





## SPRING & SHOCK ABSORBER

### OM 0393

REAR WHEEL SHOCK ABSORBER SOCKET  
SCANIA OUTER Ø56mm



### OM 0392

FRONT WHEEL SHOCK ABSORBER SOCKET  
SCANIA INNER Ø28mm



### OM 0394

REAR WHEEL SHOCK ABSORBER SOCKET  
SCANIA OUTER Ø46mm



### OM 0395

REAR WHEEL SHOCK ABSORBER SOCKET  
VOLVO



### OM 0623

NUT SPLITTER



This set allows the operator to quickly remove corroded, seized or damaged nuts. The principle is simple: the nut is sheared to release the screw thread. Practical and easy to use, this nut splitter set is a must-have in every workshop.

#### Contents:

- SA0624: nut splitter for nuts from 9 to 12mm
- SA0625: nut splitter for nuts from 12 to 16mm
- SA0626: nut splitter for nuts from 16 to 24mm
- SA0627: nut splitter for nuts from 22 à 27mm

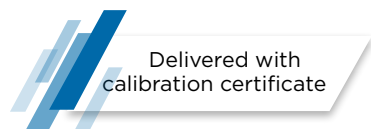
SA 0624 NUT SPLITTER 9-12mm

SA 0625 NUT SPLITTER 12-16mm

SA 0626 NUT SPLITTER 16-24mm

SA 0627 NUT SPLITTER 22-27mm



**OM 0784****TORQUE WRENCH WITH INTERCHANGEABLE HEADS**  
3/8" D. 30-110Nm 331mm

Heads: 10-11-12-13-14-15-16-17-18-19  
Conform DIN ISO 6789 2017-1

**OM 1112****SHOCK ABSORBER HEAD REMOVAL KIT**

This kit is specially designed for installing and removing shock absorber heads. Its go-through socket wrench lets you release or tighten the top cup nut while holding the damper piston steady to prevent it turning.

**Contents:**

- SA1132: ratchet wrench with loops 21mm
- SA1163: hex go-through socket 16mm L.82mm 1/2"
- SA1164: hex go-through socket 17mm L.82mm 1/2"
- SA1165: hex go-through socket 18mm L.82mm 1/2"
- SA1166: hex go-through socket 19mm L.82mm 1/2"
- SA1167: hex go-through socket 21mm L.82mm 1/2"
- SA1168: hex go-through socket 22mm L.82mm 1/2"
- SA1169: hex go-through socket 24mm L.82mm 1/2"
- SA1170: hex socket bit 6mm L.123mm 1/2"
- SA1171: hex socket bit 7mm L.123mm 1/2"
- SA1172: hex socket bit 8mm L.123mm 1/2"
- SA1173: hex socket 7mm L.123mm 1/2"
- SA1174: hex socket 8mm L.123mm 1/2"
- SA1175: hex socket 9mm L.123mm 1/2"
- SA1176: torx socket bit T50 L.123mm 1/2"
- SA1177: slotted socket bit 5x8 L.123mm 1/2"
- SA1178: slotted socket bit 6x8 L.123mm 1/2"
- SA1179: slotted socket bit 7.1x9.6 L.123mm 1/2"





**OP 3221**

**REINFORCED PNEUMATIC SPRING  
COMPRESSOR WITH ARTICULATED JAWS**

Specially designed to adapt to widely spaced loop springs and securely hold them in place.

Thanks to the innovative articulation system, automatic adjustment takes place when the spring is compressed.



**Flash to  
watch the  
video!**

**Specifications:**

- height: 1600mm
- base:  
length: 847mm  
width: 628mm
- working pressure 6bar/max 10bar
- compression strength 2452kg
- use and maintenance instruction book.
- color: grey
- 2 position adjustable lower cup (e.g. Chrysler,  
Dodge RAM long travel shock absorber...)
- weight: 70kg

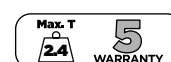
**Contents:**

- OP2003: articulated upper jaws
- SA6904: lower cup 125-205mm
- SA6916: reinforced lower cup 78-130mm
- SA6906: fall protection support



OP 2003

ARTICULATED UPPER JAWS



**OP 3231****PNEUMATIC SPRING COMPRESSOR 3T**

Specially designed to fit and securely hold coil springs wide apart. Thanks to the innovative articulation system, the adjustment is automatic when the spring is compressed.

**Specifications:**

- compression force: 3000kg
- stroke: 330mm
- operating pressure: 6bar/max. 10bar
- dimensions: H.1800xL.871xI.690mm
- operating and maintenance instructions
- conformity 2006/42CE
- weight: 110kg
- lower cup adjustable on 2 positions (ex: Chrysler, Dodge RAM long travel shock absorber...)
- equipped with wheels for easy movement
- protection grid lined with high resistance polycarbonate plexiglass

**Contents:**

- OP2003: articulated jaws
- SA6904: 1 cup Ø125 to Ø205mm
- SA6916: 1 cup Ø78 to Ø130mm
- SA6906: fall arrest support



OP 2003 ARTICULATED UPPER JAWS



**OM 2300**

**SPRING COMPRESSOR 2300Kg**



Flash to  
watch the  
video!

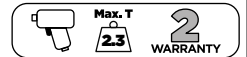


Universal  
Safety: spring lock

This exclusive self-contained compressor is designed with fully adjustable jaws. It has a wide range of coil spring and strut applications. It is portable for convenient use "on or off the car".

**Specifications:**

- specific design for intervention on front and rear Macpherson type shock absorber
- adjustable jaws for high vehicle compatibility
- intelligent jaw design for optimum spring retention
- impact wrench compatible
- powerful
- security device
- body: 450mm
- compression: 2300Kg
- min-max jaws opening: 100-265mm
- drive: Hex 24mm



**OM 3637BL**

**PAIR OF SPRING COMPRESSORS**



**Specifications:**

- 2 long shafts: 330mm, drive 13mm, opening 320mm
- 2 medium shafts: 215mm, drive 13mm, opening 200mm
- 2 short shafts: 175mm, drive 19mm, opening 170mm
- Jaws width 100mm, depth 13mm
- Ømax spring: 16mm





## SILENT BLOCK

## OM 9386

## HYDRAULIC PRESS TOOL SET 18T

Universal tool for silent-block, ball joint, bearings or sealing shaft.



This hydraulic press tool set allows for faster removal and reinstallation, efficient, accurate for safe work. No need to put down chassis components like suspension arms or undercarriages. You can work directly on the vehicle and save a lot of time on labor.

The OM 9386 set presents long (110mm) and short (40mm) bushes of different diameters (26 to 60mm) and also a 18T hydraulic cylinder which facilitates the extraction of parts to be replaced.

**Contents:**

- SA9382: hydraulic pump with pressure cups
- SA9389: Threaded rod M20x350 (with o ring to block the sockets)
- SA9383: pressure adapter
- set of 22 short bushes (40mm)
- set of 22 long bushes (110mm)
- plastic case
- SA4215: 1/4"-3/8" adapter

**Specifications:**

- internal length (press frame): 290mm
- internal width (press frame): 110mm
- maximum load of press frame: 14T
- maximum load of hydraulic cylinder: 18T



TN

## OM 9385

## HYDRAULIC EXTRACTION SET

**Contents:**

- SA9384: hydraulic cylinder 18T with 3/8" adapter
- SA9385: push spindle M10x1.5
- SA9386: push spindle M12x1.75
- SA9387: push spindle M14x1.5
- SA9388: push spindle M16x2.0
- 22 short bushes (40mm)
- 22 long bushes (110mm)
- plastic case
- SA4215: 1/4"-3/8" interface connector



**OM 9383****18T HYDRAULIC PRESS PACK + HYDRAULIC AIR PUMP/HOSE/CONNECTOR**

Universal tool for silent blocks, ball joints, bearings or sealing rings.

This pack allows you to remove and reinstall them quickly, efficiently and precisely in a very safe manner.

Without any need to remove the chassis components such as the suspension arm or the undercarriage, it allows you to work directly on the vehicle and save a considerable amount of time on the labor.

It includes a hydraulic press set with pressure support sockets (L.40mm and L.110mm) with diameters of between 26 and 60mm and an 18T cylinder + 4 extraction rods of 10-12-14-16mm which facilitate the extraction of the parts for replacement.

**Contents:**

- OM9386: hydraulic press set
- OH0014: 10T hydraulic air pump 1/4"
- SA0802: hose 1/4"
- SA0803: female hydraulic adaptor
- SA4215: hydraulic adaptor 1/4"-3/8"

Max. T  
18**SA 9382****HYDRAULIC PUMP WITH FRAME AND SPINDLES**

Spare part of OM 9385/OM 9386/OM 9387/OM 9287

Accessory of OM 2511/OM 2512/OM 2518/OM 3616/SA 9383

TN



Easy, without strain

The hydraulic press enables extraction and setting up of silent-blocks and hubs directly on the vehicle without even removing the car frame.  
The cylinder must be coupled with manual pump SA0808 or hydropneumatic pump OH0014, an hydraulic adapter SA4215 and a flexible SA0802 .

Max. T  
182  
WARRANTY**OM 5023****UPPER/LOWER HUB RENAULT/OPEL EXTRACTION RING SET**

Accessory of OM 3615/OH 0921/OH 0931/OH 0951/  
SA 9382/SA 9383/OM 9386/OM 9383

For Renault Master, Opel Movano, Nissan Interstar

**Contents:**

- OM2511: bottom hub extraction rings Renault/Opel
- OM2512: upper hub extraction rings Renault/Opel

Compatible with OM3615 and workshop presses.

2  
WARRANTY

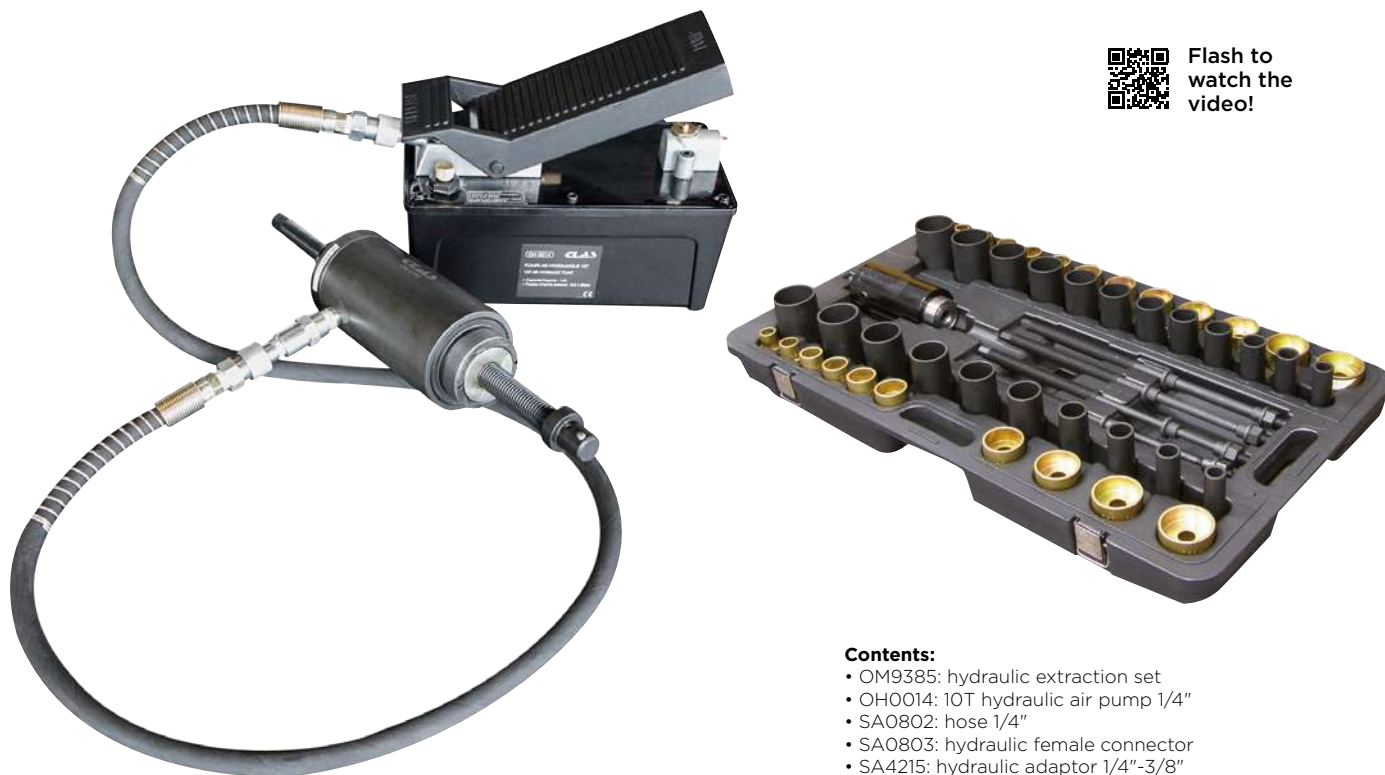
**OM 9373****18T HYDRAULIC EXTRACTION PACK + HYDRAULIC AIR PUMP/ HOSE/CONNECTOR**

Universal tool for silent blocks, ball joints, bearings or sealing rings. This pack allows you to remove and reinstall them quickly, efficiently and precisely in a very safe manner.

It includes a hydraulic extraction set with pressure support sockets (L.40mm and L.110mm) with diameters of between 26 and 60mm and an 18T cylinder + 4 extraction rods of 10-12-14-16mm which facilitate the extraction of the parts to be replaced.



Flash to watch the video!

**Contents:**

- OM9385: hydraulic extraction set
- OH0014: 10T hydraulic air pump 1/4"
- SA0802: hose 1/4"
- SA0803: hydraulic female connector
- SA4215: hydraulic adaptor 1/4"-3/8"

Max. T  
18

**OM 9384****18T HYDRAULIC EXTRACTOR**

Accessory of OM 3420/OM 3424/OM 3425/OM 3426/OM 3427/OM 3428/OM 3429/OM 3430/OM 9387/OM 3417

Hollow ram for extraction and replacement of silent-blocks, ball joints, side shafts, crank shafts, wheel bearings.



Easy, without strain

**Contents:**

- SA9384: 18T hydraulic extraction ram
- SA9385: threaded rod M10x1.5
- SA9386: threaded rod M12x1.5
- SA9387: threaded rod M14x1.5
- SA9388: threaded rod M16x1.5
- SA4215: 1/4"-3/8" hydraulic adapter

**Options:**

- SA0808: manual pump
- OH0014: hydropneumatic pump

Max. T  
18



**OM 9387****20 LARGE Ø SOCKET SET**

Accessory of OM 9385/OM 9373/OM 9386/OM 9383/OM 9382

Flash to  
watch the  
video!

Contains 10 black long socket (L. 100mm) and 10 gold short socket (L. 30mm) with different diameters (70 to 88mm).

**OM 9370****SILENT-BLOCK STAB. BAR EXTRACTOR  
Ø70mm MERCEDES ACTROS**

Accessory of OM 9384/OM 9385

**OM 9391****SILENT BLOCK EXTRACTOR SAF Ø158mm**

SK INTRAAX XO/XU

Silent-block dimensions: 155/32x114  
Silent-block OEM code: 4177302800A

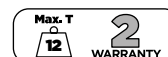
**OH 3512****GO-THROUGH MECHADRAULIC CYLINDER  
12T+ADAPTERS**

Accessory of OM 9381

**Specifications:**

- force: 12T
- stroke: 8mm
- tightening torque max: 56Nm

Supplied with adapters M10, M12, M14, M16, M18x1.5



OM 9381

HGV SILENT-BLOCK PULLER/INSTALLATION SET

Allows the extraction and installation of split silent-blocks, which need to be compressed to be installed.



- Applications of half-rings + support ring:
- Ø56mm: Iveco Eurostar (Cabin)
  - Ø58mm: Mercedes 3229B, 650,652 and Volvo
  - Ø60mm: Mercedes and Iveco Eurostar (stabilizer), Renault Kerax, Magnum, Premium (blade spring)
  - Ø63mm: DAF
  - Ø65mm: Mercedes Actros (stabilizer) and Atego
  - Ø66mm: Iveco Eurostar (cabin)
  - Ø68mm: Man (front), ROR, SAF
  - Ø70mm: Man
  - Ø75mm: Mercedes Actros (stabilizer)

- Contents:**
- support sockets (long and short) small diameter
  - support sockets (long and short) large diameter
  - 9 sets of half-rings + support ring
  - silent-block compression vice
  - extraction rod M20 + Nuts
  - spacer for mechanical-hydraulic cylinder
  - 1 step stop



OM 9388

SILENT-BLOCK UNIVERSAL EXTRACTION KIT



SA 9289	THREADED ROD M10x1.5 L.350mm+NUT
SA 9290	THREADED ROD M12x1.5 L.350mm+NUT
SA 9291	THREADED ROD M14x1.5 L.350mm+NUT
SA 9292	THREADED ROD M16x1.5 L.350mm+NUT

- Contents:**
- 6 stepped end caps for cylinders: 34-36-38-40-42-44-46-48-50-52-54-56-58-60-62-64-66-68-70-72mm
  - 4 threaded rods Ø10-12-14-16mm
  - 2 guided bearings

Stepped end caps and numbered cylinders for easy identification.



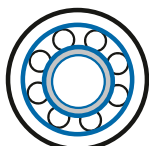


# MECHANICS



**HUB**

**P.310**



**BEARING**

**P.325**



## HUB SOCKETS

TN

**OM 0565**

1" D. IMPACT HEX SOCKET Ø65mm



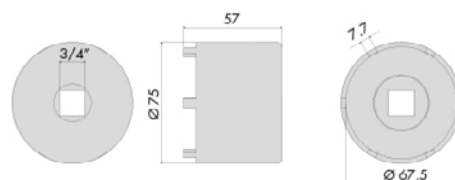
TN

**OM 0585**

1" D. IMPACT DOUBLE HEX SOCKET Ø85mm



TN

**OM 0001**6 PIN REAR HUB SOCKET LCV  
Ø67.5mm

OEM codes: T50017, CH-50112

Renault : Movano ,Master

VW : LT, Crafter

Nissan : Interstar

Mercedes : Sprinter (with axles 741,130,131,413,414,416,420,42  
2,453,454,455,429)

TN

**OM 0156**3/4" D. DOUBLE HEX SOCKET  
Ø56mm FORD TRANSIT

TN

**OM 4024**

REAR HUB BOLT REMOVAL WRENCH  
RENAULT/MASCOTT 3/4" D.

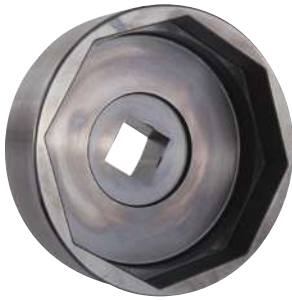
**Specifications:**

- 4 jug-sockets (width 13.5mm)

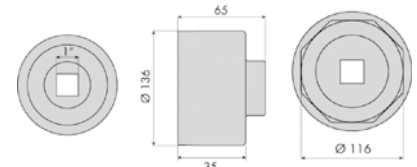
Brand: Renault



TN

**OM 0343**

8-SIDED SOCKET Ø116mm  
RENAULT/VOLVO/DAF

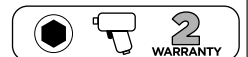


TN

**OM 0567**

1" D. IMPACT HEX SOCKET Ø77mm

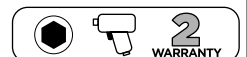
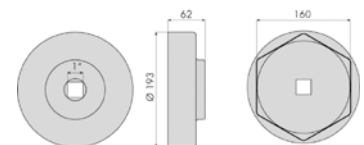
Renault Mascott 4



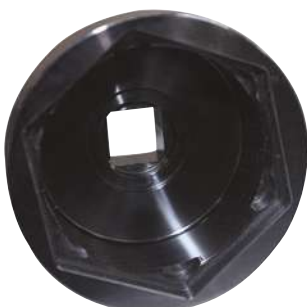
TN

**OM 0336**

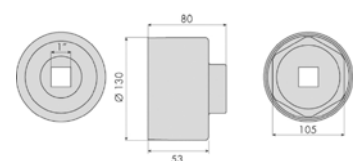
HEX HUB SOCKET RENAULT  
FONTENAC TRAILER  
Ø160mm



TN

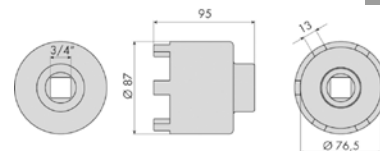
**OM 0342**

1" D. HEX REAR HUB SOCKET  
IRISBUS/VOLVO Ø105mm




**OM 0319**

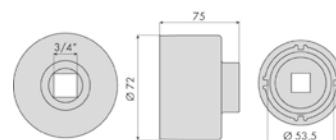
6 PIN FRONT HUB SOCKET  
MAN Ø76.5mm



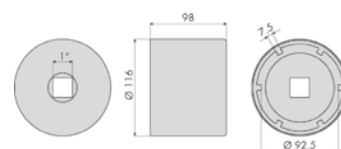
Suitable for front axles M3, ME, MI and for rear axles 3MR, 5MR


**OM 0352**

4-PIN MAN TRANSMISSION  
SOCKET Ø53.5mm


**OM 0306**

6 PIN FRONT HUB SOCKET  
MAN Ø92,5mm

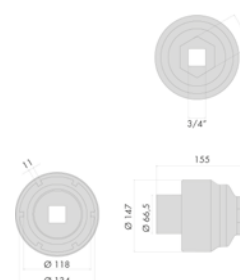


Suitable for Man TGA V9, 82L, 01, F2000


**OM 0384**

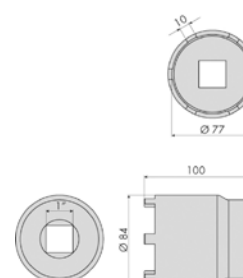
6 PIN DRIVE AXLE NUT SOCKET  
MAN TGA Ø118mm

Suitable for MAN TGA 460 axles, V9-82L-01 (disc brakes & ABS).  
Removable guide.


**OM 0318**

6 PIN FRONT HUB SOCKET MAN  
Ø77mm

Suitable for front axles VW2, 4, 6.1 and 6.8

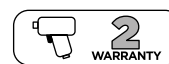
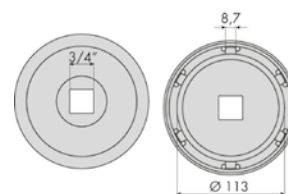




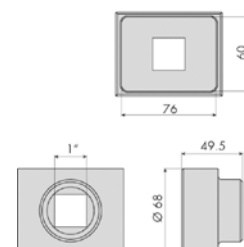
TN

**OM 0353**

MAN/MERCEDES DIFFERENTIAL  
REAR NUT 6 PIN SOCKET Ø113mm

**OM 0313**

RECTANGULAR HUB SOCKET  
MAN/MERCEDES 60x76mm



Suitable for DAF, KASSBOHRER/  
SETRA Man and Mercedes  
SK VL5/1 D-9 series 2629 in 6x4, 2635K  
in 6x4 and 3535K in 8x4

**OM 0354**

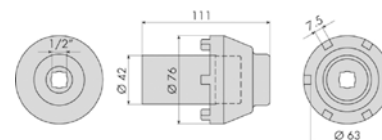
6 PIN SOCKET FOR REAR AXLE NUT  
MERCEDES CITARO Ø123.5mm



For ZF car lifts  
Pin width: 10.8mm  
Hex. drive 32mm

**OM 0303**

6 PIN HUB SOCKET SPRINTER  
Ø63mm



Rear models: HL 0/3, 0/6, 0/7, HL  
1/2, 1/3, 1/8, 1/9, HL 2/2, 2/3, 2/5, 2/9,  
2/11, 2/12, 2/15  
Specific to Sprinter 412T, VW LT

**OM 0350**

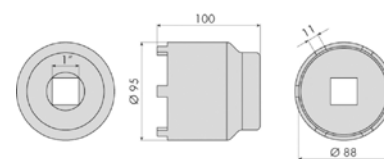
HEXAGONAL SOCKET FOR MERCEDES/  
EVOBUS DIFFERENTIAL NUTS Ø72mm



Suitable for Mercedes Citaro  
et EvoBus, ZF axle 132

**OM 0323**

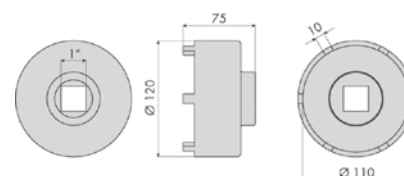
6 PIN REAR AXLE SOCKET VARIO/  
SPRINTER/ATEGO Ø88mm



Suitable for Vario 814, Sprinter  
616, Atego HL 2/43 DG6.2

**OM 0300**

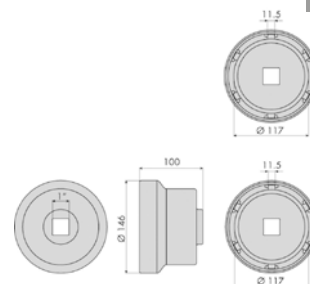
6 PIN REAR HUB SOCKETS  
MAN BUS Ø110mm




**OM 0322**

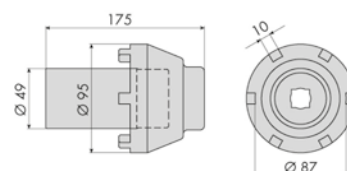
6 PIN HUB SOCKET MAN &  
MERCEDES Ø117mm

Suitable for rear axles TGA


**OM 0386**

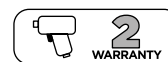
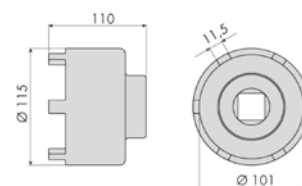
6 PIN REAR AXLE NUT SOCKET  
MERCEDES/MAN Ø87mm

Suitable for Atego, Vitaro 814 and MAN rear axles.

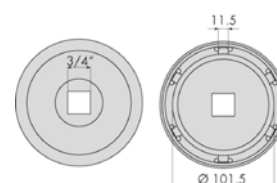

**OM 0387**

6 PIN REAR AXLE NUT SOCKET  
MERCEDES/MAN Ø101mm

Suitable for Hypoid and trailer axle NR7/4, Omnibus  
0305G, 0405G.

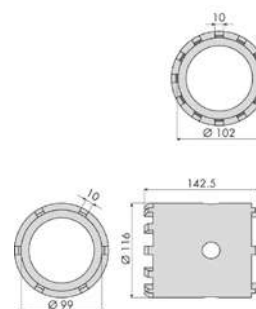

**OM 0388**

6 PIN DRIVE AXLE NUT SOCKET  
MAN/MERCEDES Ø101.5mm


**OM 0321**

12 & 6 PIN REVERSIBLE  
HUB SOCKET MAN/  
MERCEDES Ø102mm

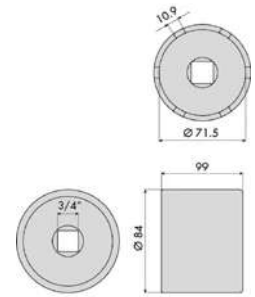
For models prior to 7TN AL 7/1  
For models before 10TN/13TN,  
HL 7/0, 7/1, 7/2, 7/3, 7/18, 7/015,  
7/021, HO 7/8, 7/9, HD 7/2, 7/19DG,  
7/016DG



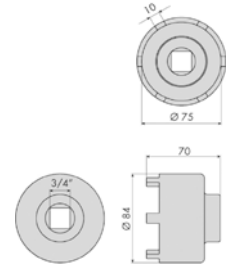
TN

**OM 0307****6 PIN REAR HUB SOCKET  
MERCEDES Ø71.5mm**

Suitable for rear models HL 2/2, 2/7, 2/13



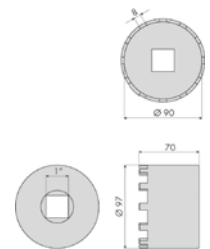
TN

**OM 0309****6 PIN REAR HUB NUT SOCKET MERCEDES  
Ø75mm**Suitable for front hubs AL 3/1, 3/2, 3/3, 3/4, 3/7, 3/8  
For rear hubs HL 2/14, 2/30, KL 2/16, 4/1, 4/4, 4/8, 4/16,  
4/17, 4/23, 4/28, 4/29, KD 4/6G, HO 4/2, 4/18, NR 4/4

TN

**OM 0305****12 PIN REAR HUB SOCKET MERCEDES  
Ø90mm**

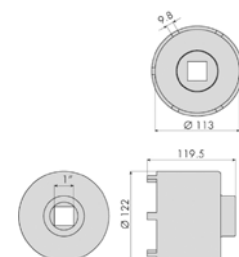
Suitable for Mercedes Actros 1840, rear axle BRG year 2001



TN

**OM 0308****6 PIN TRAILER HUB SOCKET  
MERCEDES Ø113mm**

Suitable for models NSA/2, NSA/10, HL 6/1, 6/2, 6/3, HD 6/3



TN

**OM 0385****6 PIN REAR AXLE NUT SOCKET BENZ Ø116mm**

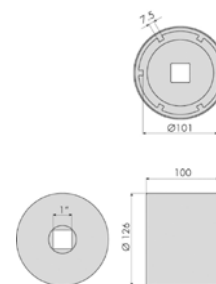
Suitable for HL/HL8 Actros axles.





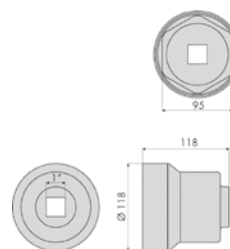

**OM 0311**

6 PIN HUB SOCKET  
MERCEDES ATEGO Ø101mm


**OM 0301**

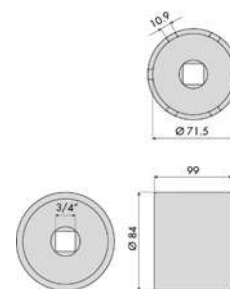
HEX MERCEDES HUB SOCKET  
Ø95mm

Suitable for axles and trailers


**OM 0307**

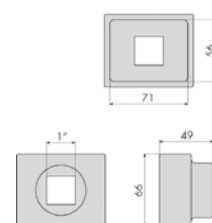
6 PIN REAR HUB SOCKET  
MERCEDES Ø71.5mm

Suitable for rear models HL 2/2, 2/7, 2/13


**OM 0312**

RECTANGULAR HUB SOCKET FOR  
KASSBOHRER/SETRA/DAF/MERCEDES  
56x71mm

Suitable for Kassbohrer/Setra:  
Front axles 6.5T and 7.5T on S210, 215, SG 219-221  
Rear axles type S216 HDS and S228 DT, 0303, 0305-G, 0307  
Daf/Mercedes: VL 3/8, 3/13, 4/7, 4/9, 4/10, 4/15, 4/16, 4/19, VD  
4/14, 4/20, type 363, 385, 387, 389, 391, 393, 395, 617, 620, 621,  
622, 623, 625, 649  
Mercedes-Autobus: VO 3/10, 4/11, 4/13, 4/19 type 0303, 0305-G  
and 0307


**OM 0350**

HEXAGONAL SOCKET FOR MERCEDES/  
EVOBUS DIFFERENTIAL NUTS Ø72mm

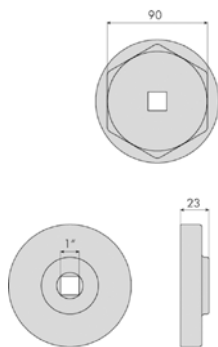
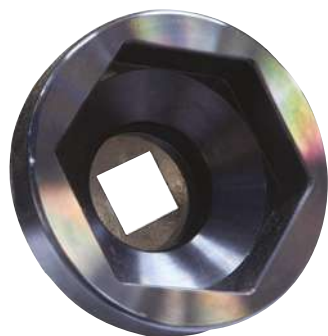
Suitable for Mercedes Citaro et EvoBus, ZF axle 132



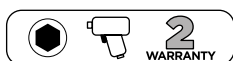
**OM 0341**

HEX HUB SOCKET IVECO Ø90mm 1" D.

TN

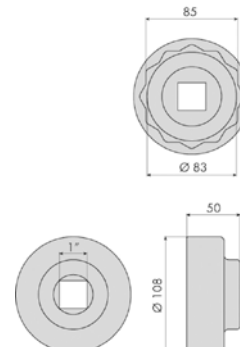


Suitable for Iveco Cargo HA&gt;98

**OM 0331**

DOUBLE HEX HUB SOCKET IVECO Ø85mm

TN

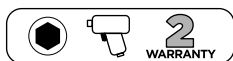
**OM 0382**

IVECO AXLE NUT SOCKET 98mm HEX

TN



Suitable for Iveco Eurocargo

**OM 0383**AXLE NUT SOCKET IVECO 110mm  
DOUBLE HEX

TN



Suitable for IVECO Eurotech Cursor HA.

**OM 0479**SHAFT BEARING INSTALLATION GUIDE  
IVECO DAILY

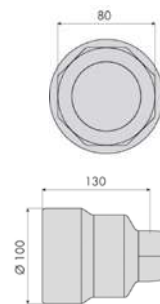
TN




**OM 4480**

8-SIDED FRONT HUB NUT  
SOCKET SCANIA Ø80mm

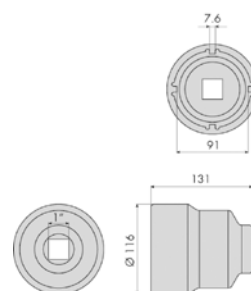
Scania 124L, 144L, series 4<96



TN


**OM 0324**

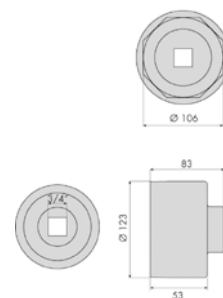
4 PIN REAR AXLE SOCKET  
SCANIA Ø91mm



TN


**OM 4100**

8-SIDED REAR HUB NUT  
SOCKET SCANIA Ø100mm 3/4"

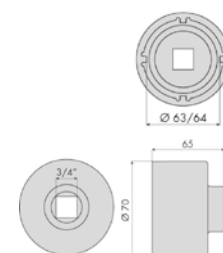


TN


**OM 0351**

4-PIN SCANIA TRANSMISSION  
SOCKET Ø63-64mm

Suitable for Scania 310, 320



TN

**OM 0389**

GROOVE NUT SOCKET WITH 8  
STUDS SCANIA 420 Ø103mm



Specific for SCANIA 420  
Heavy duty tipper.



TN

**OM 0399**

3/4" 95mm OCTOGONAL SOCKET  
SCANIA 10 WHEELS



TN



TN

**OM 0370**

3/4" ROLLER BEARING AXLE NUT SOCKET BPW  
6.5/9T 65mm

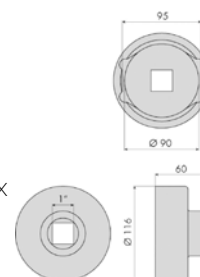


TN

**OM 0334**

HUB SOCKET BPW TRAILERS  
6.5-9T

Suitable for axles 6.5-9T type H, R, N, ECO H/K/N, ECO-MAXX  
H/K/N, ECOPlus H, ECOPlus 2 H/KH

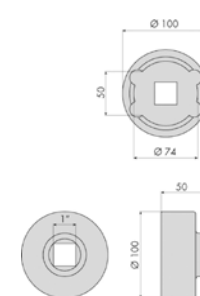


TN

**OM 0335**

HUB SOCKET BPW TRAILER 12T

Suitable for axles 12T type H, R, K, N, ECO H/  
KH/N, ECO-MAXX H/KH/N, ECOPlus H/KH



TN

**OM 0371**

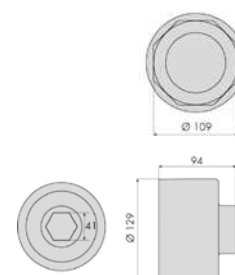
3/4" ROLLER BEARING AXLE NUT  
SOCKET BPW 12T 80mm



TN

**OM 0373**

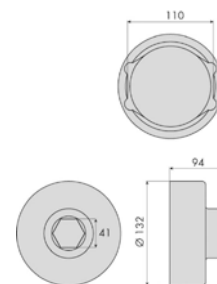
REAR HUBCAP NUT SOCKET  
BPW 12T 109mm 8-SIDED





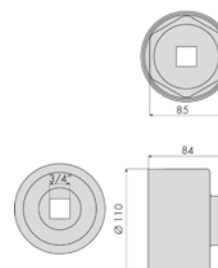
**OM 0374**

REAR HUBCAP NUT  
SOCKET BPW 12T 111mm



**OM 0372**

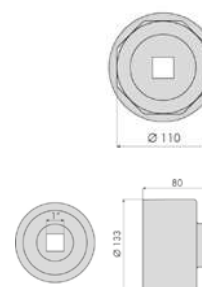
3/4" ROLLER BEARING AXLE NUT  
SOCKET BPW 16T HEX



**OM 0375**

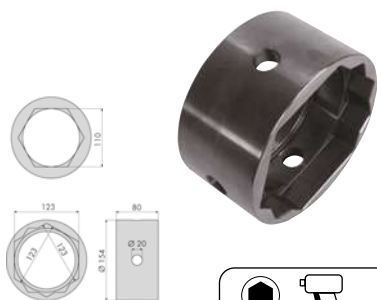
REAR HUBCAP NUT SOCKET  
BPW 16T 110mm 8-SIDED

Suitable for the new BPW 16T axles



**OM 0333**

HEX REVERSIBLE HUB  
SOCKET FRUEHAUF TRAILERS  
123mm/110mm

**OM 0376**

AXLE TRAILERS NUT  
SOCKET SAF 85mm HEX

**OM 0332**

HEX HUB SOCKET RENAULT/  
SAF Ø140mm

**OM 0330**

8-SIDED HUB SOCKET R.O.R TRAILERS 84mm

**OM 0329**

8-SIDED HUB SOCKET R.O.R TRAILERS 127mm

**OM 0377**

WHEEL CAPSULE AND AXLE NUT SOCKET 65mm 3/4"

**OM 0378**

WHEEL CAPSULE AND AXLE NUT SOCKET 80mm 3/4"

**OM 0379**

WHEEL CAPSULE AND AXLE NUT SOCKET 85mm 3/4"

**OM 0380**

WHEEL CAPSULE AND AXLE NUT SOCKET 111mm 3/4"

**OM 0381**

WHEEL CAPSULE AND AXLE NUT SOCKET 120mm 3/4"

**OM 0355**

UNIVERSAL HGV HUB COVER REMOVAL TOOL



- from Ø47mm to Ø145mm
- 3/4" D.
- 3 sets of pins for castle nuts





# HUB PULLER


**OM 3455**
**UNIVERSAL HGV HUB PULLER  
(5 ARMS)**
**Features:**

- max. opening diameter: 425mm
- for nuts M14 to M22
- force up to 30T



TN

**2**  
WARRANTY

**OM 9208**
**MULTI-BRAND HUB PULLER (CARS & LCV)**


Covers most light vehicles & vans (Jumpy, Iveco, Boxer, Master, Trafic, Ducato, Sprinter...)  
Applications on demand.

**Contents:**

- 4 extraction screws M12x1.5
- 4 extraction screws M14x1.5
- 1 mechanical spindle
- disc Ø90 to Ø170mm
- 4.3kg slide hammer



SA 9205 4 PCS WHEEL BOLT SYSTEM (MALE/FEMALE) M12x125

SA 9206 4 PCS WHEEL BOLT SYSTEM (MALE/MALE) M12x125

SA 9207 4 PCS WHEEL BOLT SYSTEM (MALE/FEMALE) M12x150

TN

**2**  
WARRANTY

**OM 0345**
**FRONT WHEEL HUB  
REMOVER MAN  
Ø166mm**


TN

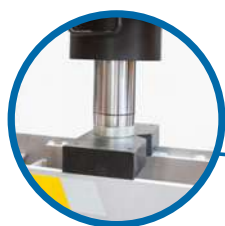
**2**  
WARRANTY

**OH 5022**
**10T HYDRAULIC DRIVE  
SHAFT PULLER SET**

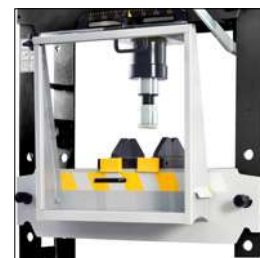

Use with 3, 4 and 5 hole vehicle studs  
Ø16mm max. for hubs with Ø135 to  
Ø250mm.

TN

**2**  
WARRANTY

**OH 0910****HYDROPNEUMATIC PRESS 100T****NEW**

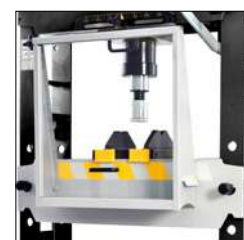
Protective  
polycarbonate grille  
to shield the operator

**Specifications:**

- 2-speed hydraulic pump
- manual control or hydropneumatic pedal (dual pedal up and down)
- chrome plated piston with adjustment screw
- sliding cylinder with handle and positioning scale
- plexiglass protection to protect the operator against possible splinters
- table height adjustable in 12 positions
- table raising/lowering assisted by winch
- table holding by 2 oversized pins
- large pressure gauge
- reversible V-shaped support block, punch and plexiglass set included.

**5**  
WARRANTY
**OH 0951****DUAL-CONTROL HYDRAULIC PRESS 50T  
SLIDING CYLINDER**

Protective  
polycarbonate grille to  
shield the operator

**Specifications:**

- 2 speed hydraulic pump
- manual override or hydropneumatic pedal
- chrome piston with adjusting screw
- sliding cylinder jack with handle and rating scale
- polycarbonate protection to protect the operator from splinters
- table height adjustable 12 positions
- winch-assisted up and down movement of the table
- 2 oversized pins to hold the table in place
- 226x136x55mm sliding drip tray
- large manometer
- reversible V-shaped support block, including punch kit and protective polycarbonate

**Max. T**  
**50**  
**5**  
WARRANTY

**OH 0570****SWIVEL PRESS 100T+PUNCHES**

Quick three-dimensional adjustment allowing use directly on vehicles.



Inner press frame  
dimensions: 250x600mm

**Contents:**

- 180° swivelling press on mobile trolley with handling handle
- hydropneumatic pump 700bar suitable for body repair/lifting/extraction hydraulic rams
- flexible hose L. 200cm
- Punches:
  - Ø21,5x150mm
  - Ø24,5x150mm
  - Ø29x120mm
  - Ø29x220mm
  - Ø35x120mm
  - Ø39x150mm
  - Ø39x220mm
- MERCEDES ACTROS-SK-0404 ring
- reduction washer 35/25mm
- reduction washer 70/65mm





# GENERAL BEARING

## OM 3517BL

BEARING INSTALLATION/  
EXTRACTION KIT

**B.LINE**



### Contents:

- 9 adapters Ø55.5-59-62-65-66-71.5-73-78-84mm
- 3 races Ø76-86-91mm
- 3 thrust screws M12x1.25
- 3 thrust screws M12x1.5
- 3 thrust screws M14x1.5

**2**  
WARRANTY

TN

## OM 0479

SHAFT BEARING  
INSTALLATION GUIDE  
IVECO DAILY



**2**  
WARRANTY

TN

## OM 5412BL

KNIVES + CLAWS  
SEPARATOR SET

**B.LINE**



### Contents:

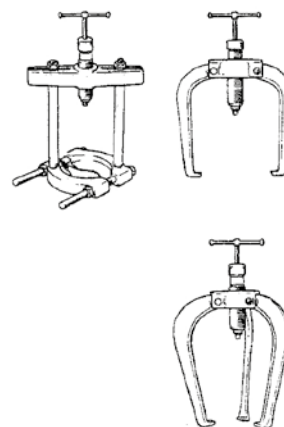
- 1 separator knife mini 13mm maxi 63mm
- 1 separator knife mini 5mm maxi 65mm
- 2 arms for knives length 60mm
- 2 arms for knives length 80mm
- 2 arms for knives length 104mm
- 2 arms for knives length 128mm
- 2 claws 110mm
- 1 mount for arms/claws width 45-150mm
- 1 pull spindle L.170mm drive 17mm

**2**  
WARRANTY

TN

## OM 3423

HYDRAULIC GEAR  
PULLER SET 10T



### Contents:

- SA3423: 1 10T hydraulic jack
- 2 arm supports 2 and 3 claws
- 3 claws L.230mm
- 3 claws L.170mm
- 3 claws L.120mm
- 2 arms for knife L.180mm
- 2 arms for knife L.235mm
- 1 arm support max. width 160mm
- 1 separating knife, 20mm - 105mm capacity - bearing separator up to Ø105mm
- 1 centerer Ø25mm
- 1 L.50mm extension, head Ø16mm
- 1 extension length 100mm, head Ø16mm

**Max. T**  
**10**  
**2**  
WARRANTY

TN

## OM 3418

### BEARING EXTRACTOR SET INTERNAL GRIP Ø8-Ø58mm



#### Contents:

- SA3411: slide hammer 1kg L.280mm
- SA3412: coming soon
- SA3413: internal grip tip Ø8-11mm
- SA3414: internal grip tip Ø12-17mm
- SA3415: internal grip tip Ø18-23mm
- SA3416: internal grip tip Ø24-29mm
- SA3417: internal grip tip Ø30-34mm
- SA3418: internal grip tip Ø34-38mm
- SA3419: internal grip tip Ø39-43mm
- SA3425: internal grip tip Ø44-48mm
- SA3426: internal grip tip Ø49-53mm
- SA3427: internal grip tip Ø54-58mm
- SA3428: adapter M10x1.5
- SA3429: reducer M10x1.5-M8x1.25
- SA3430: reducer M10x1.5-M6x1.0



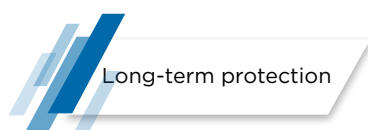
## OM 3409

### BEARING EXTRACTOR SET INTERNAL GRIP Ø8-Ø32mm



#### Contents:

- SA3401: impact hammer 1kg L.380mm
- SA3402: 1 internal-grip tip Ø8mm to 10mm
- SA3403: 1 internal-grip tip Ø10mm to 12mm
- SA3404: 1 internal-grip tip Ø12mm to 14mm
- SA3405: 1 internal-grip tip Ø15mm to 17mm
- SA3406: 1 internal-grip tip Ø17mm to 20mm
- SA3407: 1 internal-grip tip Ø20mm to 24mm
- SA3408: 1 internal-grip tip Ø25mm to 29mm
- SA3409: 1 internal-grip tip Ø30mm to 32mm



## CO 1026

### SUPER RELEASING GRAPHITE SPRAY 400ml

Thanks to its very low surface tension graphite formula, this super releasing spray penetrates deeply to erode rust, leaving a protective graphite film. Facilitates future removal.

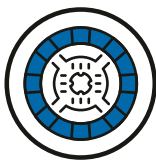
Releases and protects, minimizes friction and stops rust.

Also available in box of 12





# MECHANICS



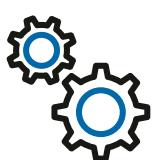
**CLUTCH**

**P.328**



**GEARBOX**

**P.330**



**TIMING TOOLS**

**P.337**



# CLUTCH

## OM 0639

### CLUTCH ASSEMBLY/DISASSEMBLY SET



Nowadays, vehicles are more frequently equipped with SAC clutches (Self Adjusting Clutch). These clutches are self-adjustable thanks to their automatic adjustment mechanism which balances the increasing loosening that comes about with wear of the clutch disc. This device ensures regular clutch strength over time and optimal comfort.

Care is required when assembling these clutches because it could deform the clutch mechanism bell cover or displace it if it is done incorrectly. To avoid these problems, the assembly/removal of SAC clutches must be carried out with a special tool.

#### Applications:

Audi	Kia	Saab
BMW	Land Rover	Suzuki
Chevrolet	Mazda	Toyota
Daewoo	Mercedes	Volvo
Fiat	Mitsubishi	VW/Skoda/Seat
Ford	Opel/Vauxhall	Covered the majority of the vehicles equipped of SAC clutches.
Honda	Porsche	
Hyundai	PSA	
	Renault/Nissan	

Supplied with Ø15.8mm new pin for PSA DV10 engines and with new pin for Puma and Opel engines.



## OM 0617

### CLUTCH ALIGNMENT TOOL



#### Specifications:

- length 150mm
- sockets Ø15-16-17-19-20-21-23-25mm



## OM 0618

### CLUTCH AXIS EXTRACTOR FIAT/PSA



For Fiat Ducato and Peugeot Boxer from 1994 with pull-type clutch. For extracting clutch stem to remove the transmission.



## OM 0621

### HGV CLUTCH ALIGNMENT TOOL

For accurate mouting, positioning and centric on single and double disc clutches.



#### Contents:

- 1 expanding guide from 36 to 48mm
- 1 expanding guide from 42 to 52mm
- 4 centering valves Ø20-25-27-30mm



**HU 1108**

MINERAL/MULTIGRADE OIL ELECTRIC  
CLUTCH BLEEDER 5-20L 3.5bar

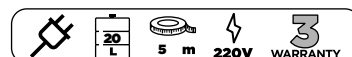
**Specifications:**

- 220V power supply (5m cord)
- equipped with an on/off switch
- with pressure regulator 0-3.5bar
- pressure gauge for pressure control
- capacity 5 to 20 litres, allowing several operations
- flow rate: 40l/h
- interchangeable canister: ensures compatibility of the mineral/multigrade/pentosin liquid...
- flexible L.3.5m
- automatic triggering
- dimensions: 850x400x330mm
- weight: 22kg

Recommended for HPS-2 gearboxes and clutches with secondary expansion tank (Mercedes Actros MP-II, ATEGO, AXOR...).



HU 1116	HGV MERCEDES PLUG SET	Accessory of HU 1103/HU 1102/HU 1101/HU 1108
HU 1117	HGV MAN TGA PLUG SET	Accessory of HU 1102/HU 1103





# GEARBOX

TN

Specially designed to remedy gearbox oil cooler failures that immobilize the vehicle, the radiator replacement is mounted instead of the defective radiator. It then allows a normal circulation of oil in the circuit. The vehicle can be driven back to the nearest garage.

**OM 3970**

GEARBOX OIL COOLER  
SUBSTITUTE DAF 105

**OM 3971**

GEARBOX OIL COOLER  
SUBSTITUTE DAF 95



**2**  
WARRANTY

**HU 8005**

GEARBOX REFILLING DEVICE WITH ADAPTERS

Pneumatic and manual pump for fluid refilling. Includes an adapter kit with various outlet angles: made for the poorly accessible areas.



SA8515: oil filling adapter set



**Specifications:**

- manual flow speed: 0.1l/pump
- pneumatic flow speed: 0.18 at 0.2l/sec
- maximum pressure: 7bar
- drain valve of tank: 1bar
- supplied with a set of 15 connectors
- graduated bowl
- 60 psi manometer
- transport handle
- 1/4 turn valve supply/drain
- offset filling plug

**12.5**  
L **1.5** m **2**  
WARRANTY

TN

Deadman lowering control

**OH 0236**

2 STAGE PIT JACK 800kg

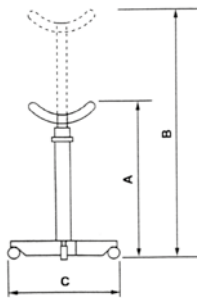
Max. Kg  
**800** **2**  
WARRANTY

**OH 0237**

2 STAGE PIT JACK 1.5T

**Specifications:**

- foot control
- chromed rod
- overload safety
- 4 swiveling wheels



REF	Capacité Capacity	A (mm)	B (mm)	C (mm)	Poids Weight
OH 0236	800kg	850	1870	480	49kg
OH 0237	1500kg	880	1900	700	58kg

Max. T  
**1.5** **2**  
WARRANTY





**OM 0478****PRIMARY SHAFT SUPPORT FOR ZF ECOSPLIT GEARBOX**

ZF 16 S 130  
ZF 16 S 160  
ZF 16 S 190  
ZF 16 S 220  
ZF 16 S 221

Engine codes:  
1X56137122/99360515

**OM 0475****SPLITTER ADJUSTMENT TOOL FOR ZF ECOSPLIT GEARBOX****OM 0460****ZF16 GEARBOX BEARING PULLER**

Delivered with 5 sets of cups allowing the bearing to grip at the bar turning level, without risk of damage.

**OM 0462****NEUTRAL POSITION ADJUSTMENT TOOL FOR ZF AS TRONIC GEARBOX**

DAF (Euro 3-4-5)

**CO 1016****50 ml GEARBOX LEAK STOP**

Effectively stops gearbox oil leaks, protecting them against insufficient lubrication and possible breakage. Suitable for all types of manual gearboxes, transfer cases and differentials.

**Specifications:**

- revives seals and sealing rings
- reduces wear and tear
- ensures optimal lubrication
- prevents oil oxidation

Do not use for automatic transmissions and integrated oil bath clutches.

Also available in box of 24

**CO 1017****300 ml ANTI-FRICTION ENGINE/GEARBOX**

Preventive and curative anti-friction for engines and gearboxes. Reduces friction and provides a wear-resistant coating for long engine life. Revives gaskets.

**Dilution:**

- engine: 6 to 7.5% (one bottle for 4 to 5L of engine oil)
- gearbox: 10% of the oil volume

Optimum efficiency after using the engine cleaner before draining (CO1015)

Also available in box of 24



**OM 0470**

3 BEARING MOUNTING TUBES FOR ZF16  
ECOSPLIT GEARBOX



OM0471 : 1 x bearing mounting tube for zf16 ecosplit gearbox  $\varnothing 93 \times 77 \text{mm}$   
OM0472 : 1 x bearing mounting tube for zf16 ecosplit gearbox  $\varnothing 96 \times 90 \text{mm}$   
OM0473 : 1 x bearing mounting tube for zf16 ecosplit gearbox  $\varnothing 102 \times 96 \text{mm}$

**OM 0477**

PRIMARY SHAFT SUPPORT FOR ZF ECOSPLIT  
GEARBOX

**OM 0476**

PRIMARY/SECONDARY SHAFT UNLOCKING  
TOOL FOR ZF16 ECOSPLIT GEARBOX

**OM 0461**

BEARING AND GEARWHEEL PULLER FOR  
ZF16 221-251 GEARBOX

**Contents:**

- 4 sets of cups
- 1 push screw with support pad
- removing body  $\varnothing 286 \text{mm}$
- 3 sets of connecting sticks (L. 290-378-500mm)

**Cup dimensions:**

- 1 set  $\varnothing$  ext. 179mm and  $\varnothing$  inn. 98mm
- 1 set  $\varnothing$  ext. 261mm and  $\varnothing$  inn. 155mm
- 1 set  $\varnothing$  ext. 261mm and  $\varnothing$  inn. 189mm
- 1 set  $\varnothing$  ext. 282mm and  $\varnothing$  inn. 198mm



**OM 0465**

TN

**INSTALLATION/REMOVAL PRIMARY SHAFT ZF AS TRONIC GEARBOX**

12 AS 2301 - 16 AS 2601

**Engine codes:**  
1X56138216/1X56138234

**OM 0467**

TN

**FORK HOLDING TOOL FOR ZF AS TRONIC GEARBOX**

12 AS 2301 - 16 AS 2601

**Engine codes:**  
1X56138197/99360527

**OM 3986**

TN

**BEARING PULLER FOR GEARBOXES ZF SET**

Puller + crankshaft for removing the gearbox bearing infeed for extractor.  
For AS TRONIC 10-12-16-speed.

**Contents:**

- OM3980: bevel gear puller for ZF AS TRONIC gearboxes
- OM3985: crankshaft for removing the ZF gearbox bearing infeed for extractor

**OM 3980**

TN

**BEVEL BEARING GEAR PULLER FOR ZF AS TRONIC GEARBOXES**

For ZF Astronic 10-12-16 speed gearboxes.

**Engine codes:**  
1X56122304/ 1X56136740

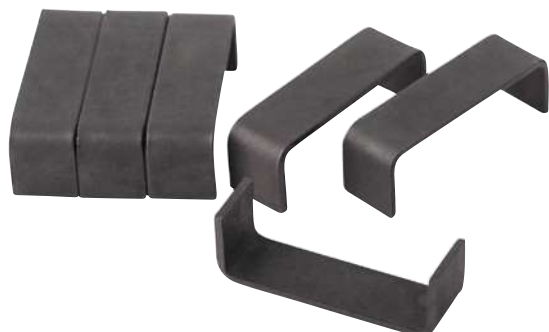




**OM 0469**

TN

SET OF 6 SYNCHRO MOUNTING CLIPS.  
REDUCING GROUP FOR ZF AS TRONIC  
GEARBOX



AS TRONIC 10 - 12 - 16 speed  
gearboxes

Engine codes:  
1X56138207/99370172

**OM 0468**

TN

3 SYNC CENTERING GUIDES FOR ZF  
AS TRONIC GEARBOX



AS TRONIC 10 - 12 - 16 speed  
gearboxes

Engine codes:  
1X56138081/99370499

**OM 0466**

TN

PRIMARY SHAFT POSITIONING TOOL ZF AS  
TRONIC GEARBOX

Allows the reverse pin to be held when removing the  
secondary shaft.



12 AS 2301 - 16 AS 2601

Engine codes:  
99370153

**OM 3987**

TN

11 BALL BEARING EXTRACTOR FOR  
ZF AS TRONIC GEARBOX



Engine codes:  
1X53188009



TN

## OM 0562

## MOVE/REMOVE HYDRAULIC KIT FOR VT VOLVO/RENAULT GEARBOX SYNCHRO



Reversible through-cylinder 20T

Engine codes:  
9992619/9992671/9994542/999688  
9/9998542/88800015



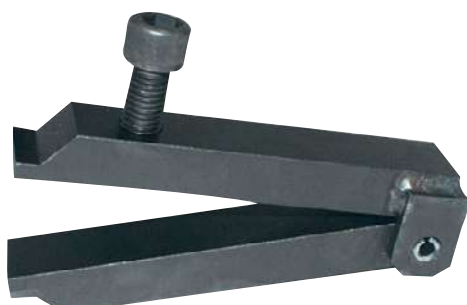
OM 0561

OIL DISTRIBUTOR REMOVAL WRENCH VT  
VOLVO/RENAULT GEARBOX



## OM 0560

## 2 SPACER PLIERS GEARBOX COVER



## OM 0563

## OUTPUT FLANGE LOCKING TOOL FOR VOLVO/RENAULT GEARBOX



**OM 0515**

4-LUG SOCKET 1" FOR INTERNAL NUT  
SCANIA BOX

**OM 0511**

4-LUG SOCKET 1/2" FOR DELAYING  
SCANIA (TYPE 1)

**OM 0512**

4-LUG SOCKET 1/2" FOR DELAYING SCANIA  
(TYPE 2)

**OM 0556**

SET OF TOOLS GASKET INSTALLATION  
DELAY TIME SCANIA (TYPE 2)

**OM 0513**

4-LUG THIN SOCKET 3/4" FOR SCANIA  
GEARBOXES WITH DELAYER



For gearboxes:  
GR801-GR900  
GRS890-GRS900-GRS920  
GRSH900  
GRSO900

**OM 0514**

4-LUG SOCKET 3/4" FOR SCANIA  
GEARBOXES WITHOUT DELAYER



For gearboxes:  
GR801-GR900  
GRS890-GRS900-GRS920  
GRSH900  
GRSO900  
Also suitable for transmissions





# TIMING TOOLS RENAULT/VOLVO

## OM 0328

FLYWHEEL ROTATOR TOOL FOR RENAULT  
MAGNUM ENGINES



TN

## OM 0327

FLYWHEEL ROTATOR TOOL FOR RENAULT/  
VOLVO ENGINES



Suitable for engines: D11, D13, D16  
(FH,D13a 520) (2008-2018 ) and  
Mack MP7, MP8, MP10 (2008-2018 )  
OEM codes :  
88800014



TN

## OM 0325

FLYWHEEL ROTATOR TOOL FOR VOLVO  
ENGINES



6 or 12 cylinder Volvo D9A,  
D12, D16C engines.

OEM codes :  
9998068



TN

## OM 0326

FLYWHEEL ROTATOR TOOL FOR RENAULT/  
VOLVO ENGINES



Suitable for DXI 11 engines

OEM codes :  
9996956 , 6956



TN

## OM 0150

INSTALLATION AND REMOVAL ROCKER ARM RAMP TOOL RENAULT/VOLVO 9-12-16L



OEM codes :  
9990185



TN

## OM 3685

CABIN SHOCK ABSORBERS ASSEMBLY/  
DISASSEMBLY PACK



### Contents:

- OM3681: pair of spring compressors cabin  
shock absorber Volvo/Renault
- OM3682: key assembly nut shock absorbers  
cabin Volvo/Renault



TN

## OM 0112

MOUNTING GUIDE CYLINDER SET VOLVO/  
RENAULT 11-12-13-16L



OEM codes :  
9998318 , 9998389 , 9998601



TN

**OM 6100****MASTER TIMING TOOL SET RENAULT/  
NISSAN/OPEL/VOLVO GENERATION 1****Engine codes:**

D4F702/706/708/712/714/716/722/728/730/740/764  
 D7F700/701/710/720/722/726/730/744/746/764/766  
 E7F700/704/706/750  
 E7J601/624/626/634/635/680/700/706/710/711/716/718/719/720/724/726/728/740/742/745/754/756/757/764/770/771/773/780  
 F3P670/682/700/704/706/708/710/712/714/720/724/755/758/760  
 F7P704/722  
 F3R611/722/723/728/729/750/751/752/791/796/797/798  
 F5R700/701/740  
 J7R732/733/734/735/768  
 F7R710/714  
 J7T600/760/761/762/766/772/780/782  
 N7Q704/710/711  
 N7U700/701  
 K4J700/710/711/712/713/714/715/730/732/740/750/770/780  
 K4M700/701/704/706/707/708/709/710/711/712/714/716/718/720/724/730/732/734/736/740/742/743/744/745/746/748/750/752/753/754/760/761/762/764/765/766/768/776/782/788/790/791/794/800/801/802/804/812/813/830  
 K9K700/702/704/706/710/712/714/716/718/722/724/728/729/732/734/740/750/752/760/762/764/766/768/802/804/806  
 F9Q610/650/664/670/674/711/716/717/718/720/722/730/731/732/733/734/736/738/740/744/748/750/752/754/758/759/760/768/762/770/772/774/780/782/784/786/788/790/796/800/803/804/808/812/816/818/820  
 G9T600/605/700/702/703/706/707/710/712/720/722/742/743/750  
 G9U720/724/726/730/750/754  
 F8M736/760  
 F8Q600/610/606/620/622/624/630/632/640/644/646/648/662/672/678/680/682/684/692/696/706/714/720/722/730/732/740/742/744/764/768/706/776/784/786/788  
 J8S620/621/622/758/760/776/778  
 G8T714/716/740/752/760/790/792/794  
 S8U720/722/730/731/742/748/750/752/770/772/780/782  
 S9U700/702/704/714/740  
 S9W700/702/206/208/212  
 E5F, E6J, K7M, F4P/F4R, FIN, F2N, F3N, F2R, F3P, F4P, F3R, J5T, J6R, J7R

**OEM codes :**

KM-6031, KM-6203, KM-6204, KM-6205, KM-6234, KV113 B0130, KV113 B0280, KV113 B0360, MOT 1054, MOT 1135-01, MOT 1200-01, MOT 1312, MOT 1318, MOT 1337, MOT 1340, MOT 1348, MOT 1384, MOT 1386, MOT 1489, MOT 1490-01, MOT 1496, MOT 1534, MOT 1536, MOT 1537, MOT 1538, MOT 1543, MOT 1750, MOT 910, K9K

**Models:**

Renault: Clio 1-2-3-4, Clio Sport 1-2-3, Mégane 1-2-3, Master 1-2, Mégane Scénic 1-2-3, Vel Satis 1-2, Avantime, Kangoo 1-2-3, Laguna 1-2-3, Espace 1-2-3, Trafic 1-2, Wind, Modus, Twingo, Koleos

Dacia: Logan, Duster, Sandero, Dokker

Nissan: Note, Qashqai, Micra, Interstar, Primastar, Kubistar, Almera, Primera

Opel: Vivaro, Movano

Volvo: S 40, V 40

**Engines:** 1.2, 1.2 16V, 1.4, 1.4 16V, 1.5 DCI, 1.6, 1.6 16V, 1.6 D, 1.7, 1.8, 1.8 16V, 1.9 TD, 1.9, 1.9 DCI, 1.9 DTI, 1.9 CDTI, 2.0, 2.0 16V, 2.1 TD, 2.2, 2.2 DCI, 2.2 DTI, 2.2 TD, 2.5 DCI, 2.5 CDTI, 2.5 TD, 2.8 D

**OM 3674****TIMING TOOLS RENAULT/OPEL/  
NISSAN/SUZUKI DCI****Models:**

Renault: Clio, Kangoo, Laguna, Espace, Master, Mégane/Scénic, Trafic

Nissan: Kubistar, Interstar, Qashqai

Opel: Vivaro, Movano

Suzuki: Grand Vitara

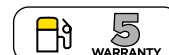
**Engines:** 1.5 DCI, 1.9 TD, 1.9 DCI, 2.2 DCI, 2.5 DCI

**Engine codes:**

K9K 700, K9K 702, K9K 704, K9K 706, K9K 710, K9K 712, K9K 714, K9K 716, K9K 718, K9K 722, K9K 724, K9K 728, K9K 729, K9K 732, K9K 734, K9K 750, K9K 752, K9K 760, K9K 762, K9K 764, K9K 766, K9K 768, K9K 790, K9K 792, K9K 830, K9K 832, K9K 834, K9K 836, F9Q 650, F9Q 660, F9Q 664, F9Q 670, F9Q 674, F9Q 680, F9Q 690, F9Q 740, F9Q 746, G9T, G9U

**OEM codes :**

G9T, G9U, KM-6031, KM-6203, KM-6204, KM-6205, KM-6234, KV113 B0130, KV113 B0280, KV113 B0360, MOT 1054, MOT 1200-01, MOT 1489, MOT 1534, MOT 1536, MOT 1537, MOT 1543, MOT 910

**OM 3686****TIMING TOOL RENAULT/NISSAN/OPEL  
1.6-2.0-2.3 DCI-CDTI****Models:**

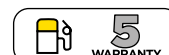
Renault: Megane, Scenic, Laguna, Latitude, Fluence, Espace, Trafic, Koleos, Vel Satis

Nissan: Primastar, Qashqai, X-trail, NV 400

Opel: Vivaro, Movano

Mercedes: C180

**Engines:** 1.6, 2.0, 2.3 DCI et CDTI





# IVECO

TN

**OM 0157**

GEARBOX AND DISTRIBUTION SHAFT  
MOUNTING GAUGE IVECO 10L

OEM codes :  
99395218

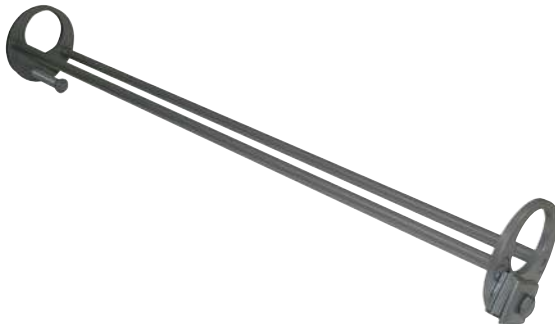
**OM 0158**

GEARBOX AND DISTRIBUTION SHAFT  
MOUNTING GAUGE IVECO 13L

OEM codes :  
99395219



TN

**OM 0151**

INSTALLATION AND REMOVAL ROCKER  
ARM RAMP TOOL IVECO 8L

OEM codes :  
99360558



TN

**OM 0152**

INSTALLATION AND REMOVAL ROCKER  
ARM RAMP TOOL IVECO 10-13L

OEM codes :  
99360553

**OM 0339**

FLYWHEEL ROTATOR TOOL FOR IVECO  
ENGINES



Suitable for 8360.46/F3A/F3B engines  
Specific for Eurocargo/Cargo 150E27R/FPR  
320E27T/PT Eurotech/Eurostar



TN

**OM 0340**

FLYWHEEL ROTATOR TOOL FOR IVECO  
ENGINES



Engines 8040-25-45/9060-25-  
45/8210.42/8260/8280/190.38/190.42  
Specific for Eurocargo/Cargo /Eurotech/  
Heavyon/OffRoad/Bus



TN



**OM 4025**

## TIMING TOOLS FIAT 2.3 JTD



Models: Ducato, Iveco, Daily

**Engines:** 2.3 JTD, 3.0 JTD, 3.0 HPI

Engine codes:

F1AE0481C, F1CE0481D, F1AE0481A, F1AE0481B, F1CE0481A

OEM codes :

1860617000, 2.000.018.200, 99360614, 99360615

**OM 0521**CRANKSHAFT FRONT SEAL INSTALLATION TOOL IVECO/  
ASTRA 10-11-13-16L**Specifications:**

- seal (MVQ) silicone rubber
- Øext. 130mm
- Øinn. 100mm
- thickness 12mm

**Engines:** F3A/F3B

Models: IVECO Eurostar, Eurotech MP, Eurotrakker, Stralis, Trakker, ASTRA HD7-C and HD8

**OM 0522**CRANKSHAFT REAR SEAL  
INSTALLATION TOOL IVECO/  
ASTRA 10-13L**OM 0525**CRANKSHAFT REAR SEAL  
INSTALLATION TOOL IVECO  
EUROCARGO 1-3**Specifications:**

- PTFE seal
- Øext. 155mm
- Øinn. 130mm
- thickness 16mm

**Engines:** F4A, N40, N45, N60**Models:** IVECO Eurocargo 1-3, Eurofire, Tector, Vertis**OM 0523**CRANKSHAFT FRONT SEAL INSTALLATION TOOL  
IVECO STRALIS 10L (F2C)**Specifications:**

- FPM seal (fluor rubber)
- Øext. 160mm
- Øinn. 130mm
- thickness 14mm

**Engines:** F3A/F3B/F2C**Models:** IVECO Eurostar, Eurotech MP, Eurotrakker, Stralis, Trakker, ASTRA HD7-C and HD8**OM 0527**CRANKSHAFT REAR SEAL INSTALLATION  
TOOL IVECO DAILY/FIAT DUCATO

Dimensions:

- Øext. 113mm
- Øinn. 83mm
- thickness 14mm

Engine: F1A 2.3i

**OM 4052**IVECO AIR-CONDITIONING ELASTIC BELT  
MOUNTING TOOL

Requires a second operator to rotate the engine.

**Applications:** IVECO  
Cursor



TN

**OM 0492**

CRANKSHAFT REAR SEAL  
INSTALLATION TOOL SCANIA Ø175mm

**Engines:** 8.9l PDE, 9.3l PDE, 10.6l PDE, 11.7l PDE, 11.7l HPI, 15.6l PDE, serie 4, serie S, serie 520  
For seal ref OEM 1433183

**OM 0493**

CRANKSHAFT REAR SEAL  
INSTALLATION TOOL SCANIA Ø185mm

**Engines:** 8.9l PDE, 9.3l PDE, 10.6l PDE, 11.7l HPI, 15.6l PDE

For seal inner Ø 145mm

**OM 0494**

CRANKSHAFT REAR SEAL INSTALLATION  
TOOL SCANIA Ø175-185mm

**Engines:** 8.9l PDE, 9.3l PDE, 10.6l PDE, 11.7l PDE, 11.7l HPI, 15.6l PDE  
OEM ref for seal Ø175: 1433183

**2**  
WARRANTY

**OM 0499**

CRANKSHAFT SEAL  
INSTALLATION RING SCANIA



Engines: 9-11-12l  
Injection PDE/HPI

**2**  
WARRANTY

**OM 0484**

CRANKSHAFT REAR SEAL  
INSTALLATION TOOL SCANIA  
Ø185mm



**Engines:** 8.9l PDE, 9.3l PDE, 9.3l XPI, 12.7l XPI, 15.6l PDE, 16.4l XPI

For seal inner Ø 155mm

**2**  
WARRANTY

**OM 0491**

CRANKSHAFT FRONT SEAL  
INSTALLATION TOOL SCANIA  
12L Ø119



Engine: 11.7l

**2**  
WARRANTY

**OM 0481**

CRANKSHAFT FRONT SEAL  
INSTALLATION TOOL SCANIA  
9-13L Ø119mm



**Engines:** 12,7I XPI



TN

**OM 0482**

CRANKSHAFT FRONT SEAL  
INSTALLATION TOOL SCANIA  
Ø149mm



**Engines:** 12,7I XPI second generation



TN

**OM 0483**

CRANKSHAFT FRONT SEAL  
INSTALLATION TOOL SCANIA  
Ø119-138mm



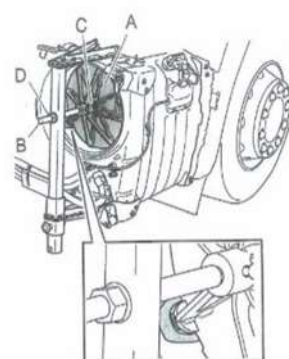
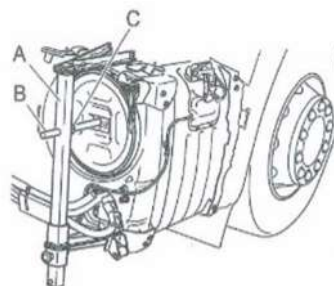
**Engines:** 15.6I PDE, 16.4I XPI  
second generation



TN

**OM 7051**

DPF ASSEMBLY/  
DISASSEMBLY SCANIA



TN

**OM 7052**

DOUBLE FAP SCANIA MOUNTING/  
DISMOUNTING TOOL



TN

**OH 8005**

HGV BATTERY/CATALYTIC  
CRANE

**Specifications:**

- Max. load: 90kg
- 4 wheels including 2 brake swivelling wheels
- lifting height: 1890mm



TN




**OM 0531****CRANKSHAFT FRONT SEAL  
INSTALLATION TOOL DAF**

Dimensions:

- Øext. 180mm
- Øinn. 154mm
- thickness 12mm

Models: DAF 75, 85, 95 CF/XF

OEM code seals : 0681704 - 682961 - 1457021  
- 681704 - 1370127 - 1275083**OM 0347****ENGINE CRANK  
ROTATOR TOOL DAF**

Suitable for DAF XF 105, Euro5.

**OM 3970****GEARBOX OIL COOLER SUBSTITUTE DAF  
105**

Specially designed to remedy gearbox oil cooler failures that immobilize the vehicle, the radiator replacement is mounted instead of the defective radiator. It then allows a normal circulation of oil in the circuit.

The vehicle can be driven back to the nearest garage.

**OM 3971****GEARBOX OIL COOLER SUBSTITUTE DAF 95**

Specially designed to remedy gearbox oil cooler failures that immobilize the vehicle, the radiator replacement is mounted instead of the defective radiator. It then allows a normal circulation of oil in the circuit.

The vehicle can be driven back to the nearest garage.



# MERCEDES/MAN

## OM 0304

FLYWHEEL ROTATOR TOOL FOR ACTROS/  
ATEGO/MAN ENGINES



Suitable for Actros/Atego  
Mercedes 900, 904, 906  
Man 5, 6, 8 cylinder engines,  
D25/D28



TN

## OM 0348

FLYWHEEL ROTATION TOOL 9 TEETH  
MAN / MERCEDES



Suitable for Euro 5-6 D20, D25, D26,  
D28 : 6, 8, 10, 12 cylinders



TN

## OM 0302

FLYWHEEL ROTATOR TOOL FOR MERCEDES/MAN ENGINES



2 gears  
Suitable for Actros 6,8,10 cylinder engines  
Mercedes 400, 401, 402, 403, 404, 407, 409H/HA,  
421, 424, 441, 444A/LA, 427, 4289, 447H/HA  
Man 12 cylinder engines



TN

## OM 4055

ADJUSTMENT KIT VAG 2.5 PD TDI



Models: Touareg, Transporter  
**Engines:** 2.5 TDI PD

Engine codes:  
AXD , AXE , BAC , BLJ , BLK , BNZ , BPC , BPD , BPE



TN

**OM 0366**
**LIEBHERR ENGINE ROTATION TOOL**

**2**  
WARRANTY

TN

**OM 5038**
**SEAL TOOL KIT 24PCS**

This kit allows the SPI seals to be replaced with diameters of Ø21.5 to Ø64mm.  
Removal: compact puller with unique extracting hooks, quick removal without any damaging.  
Installation: the interchangeable seal mandrels mean that the seal can be guided back into place for perfect positioning.  
2 pairs of claws L.70 and L.115mm for increased polyvalence.


Flash to  
watch the  
video!

**2**  
WARRANTY

TN

**OM 5041**
**17 CRANKSHAFT SEAL INSTALLATION CUPS**

**Contents:**

- 1 crankshaft seal installation tool
- 3 cups Øint 53.4 - 61.5 - 80mm
- 14 cups Øext 33 - 37.8 - 41.2 - 42.6 - 48.7 - 52 - 53.4 - 61.2 - 75.6 - 64.4 - 68.8 - 82 - 84.9 - 88.8mm

**NO**  
WARRANTY

TN

**OM 9216**
**4 HOOK SET FOR JOINTS**

**2**  
WARRANTY

TN



# ACCESSORY BELT

OM 3789

## 30PCS FREEWHEELING ALTERNATOR PULLEY DISMANTLING KIT

Series of sleeves and locknuts, allowing the disassembly of the disengageable alternator pulley (dismantled or directly on the vehicle).



Compatible with 1.6  
HDI and TDCI PSA/  
FORD

**Applications:** Renault, Peugeot, Citroën, VAG,  
BMW, Mercedes, Opel, Ford, Fiat, Toyota, Honda,  
Porsche...



OM 4044

## UNIVERSAL BELT PULLEY PULLER QUICK APPROACH Ø47-110mm



For the extraction of camshaft pulleys 2,3,4,6 and 9 arms.  
Also suitable for crankshaft pulleys/damper pulleys with  
threads in M8x1.25 and M10x1.5 and some flywheels.

Delivered with:

- claw set 1.5DCI (SA4046)
- claw set M8x1.25 L. 50mm
- claw set M10x1.5 L. 50mm



# MECHANICS



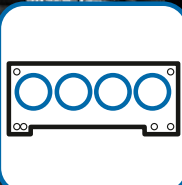
**SPARK PLUG &  
GLOW PLUG**

**P.348**



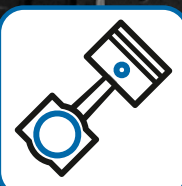
**INJECTORS**

**P.350**



**CYLINDER HEAD**

**P.362**



**PISTON & CYLINDER**

**P.366**



**FUEL**

**P.368**



**ADBLUE®**

**P.372**



# SPARK & GLOW PLUG REPLACEMENTS

## OP 1404

### VIBRATION GLOW PLUG REMOVAL KIT 1/4"

Allows the glow plugs to be removed in a progressive, controlled and secure manner.  
Reduces the risk that the electrode may break within the glow plug's housing.

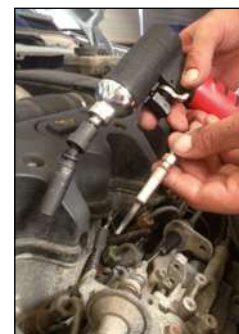


4 torque settings: 10-  
20-30 or 40Nm  
Drive: 1/4"

#### Contents:

- SA1404: vibration socket 1/4"
- SA1408: vibration socket 8mm
- SA1409: vibration socket 9mm
- SA1410: vibration socket 10mm
- SA1411: vibration socket 11mm
- SA1412: vibration socket 12mm
- SA1413: vibration extension 50mm
- SA1414: vibration extension 100mm
- SA1415: 1/4" universal joint for vibration socket

Reduces the risk of  
breaking



TN



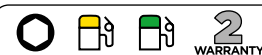
## OM 9213

### 3/8" PLUG WRENCH KIT Ø8-9-10-12-14-16mm

Friction CV joint that lets it stay in the ideal position  
Plug retention gasket.



TN





# SPARK & GLOW PLUG PULLER - SPARK & GLOW PLUG THREAD REPAIRING

**OM 3788**

## DIESEL UNIVERSAL GLOW PLUG EXTRACTOR

Minimum space required for use: Ideal when the glow plug compartment is difficult to access.

Can be used in narrow engine compartments and with glow plugs on the firewall side. Supplied with 3 hexagonal drive taps with easy centering, for thread repair.

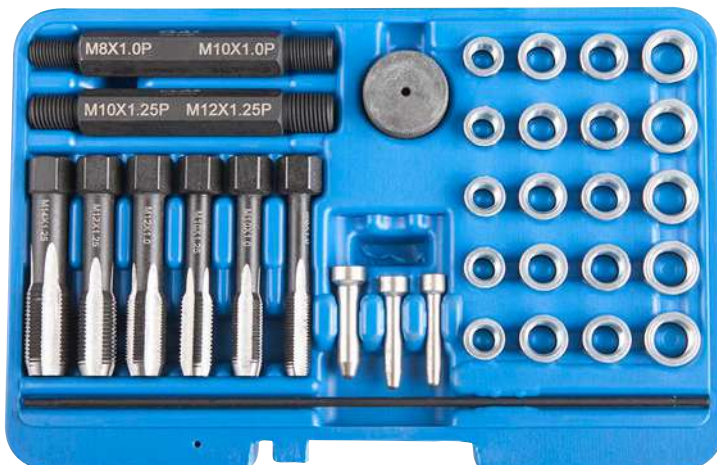


### Contents:

- SA3801: electrode extractor
- SA3802: reinforced electrode drill bit
- SA5328: 2 electrode drilling guides
- SA3803: 6.8mm stepped drill bit
- SA3804: 8.8mm stepped drill bit
- SA3805: drill bit holder
- SA3809: extraction tap
- SA3810: inertia extractor
- SA3811: M8 hexagonal drive repair tap
- SA3812: M10x100 hexagonal drive repair tap
- SA3813: repair tap M10x125 hexagonal drive


**OM 3787**

## GLOW PLUG REPAIR KIT M8x100 M10x100 M10x125 M12x125



### Contents:

- 6 repair taps (M8x100-M10x100-M10x125-M12x100-12x125-M14x125)
- 2 insertion tools
- 3 plug well plugs
- SA3785: 5 inserts M8x100
- SA3786: 5 inserts M10x100
- SA3787: 5 inserts M10x125
- SA3788: 5 inserts M12x125



## INJECTOR SYSTEM DIAGNOSTICS

### AC 4012

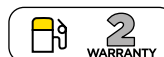
600bar PUMP FOR INJECTOR CALIBRATION



To check the diesel injectors: blocked openings, pressure and shape of jets.

Pump supply lines supplied with connections Ø12-14mm and manometer (1/2 thread in 1.75mm).

Warranty: never use this pump with diesel or other fluid.



TN



AC 4023 CALIBRATION PUMP ADAPTER M31x100



### AC 4015

DIESEL STEAM CLEANER

Improves visual trials of injectors and vacuum any spray.

#### Specifications:

- clip to hold the injector in place
- vacuum by compressed air
- device that preserves user's health



Calibration pump not included

TN



### OE 7201

ULTRASONIC CLEANER 9L 500W 40KHz

#### Specifications:

- heating temperature adjustable from 0 to 80°C
- timer from 1 to 99 minutes
- ultrasonic power: 200W
- heating power: 300W
- digital display
- tank drain valve
- tank capacity: 9l
- external dimensions: 300x240x150mm
- tray dimensions: 330x310x270mm



### OE 7200

ULTRASONIC CLEANER 3L 200W 40KHz

#### Specifications:

- heating temperature adjustable from 0 to 80°C
- timer from 1 to 99 minutes
- ultrasonic power: 100W
- heating power: 100W
- digital display
- tank drain valve
- tank capacity: 3l
- tray dimensions: 240x140x100mm
- external dimensions: 270x240x170mm



SA 7070 TUB OF ULTRASOUND CLEANING SOLUTION CONCENTRATE 25% 2l



## AC 0800

### DIGITAL MASTER KIT PRESSURE GAUGE SET

Universal digital pressure gauge, allows the measurement of all types of pressure, whether it is PNEUMATIC or HYDRAULIC.



Flash to watch the video!



Clear and precise reading of live values

The instrument is equipped with a sound and visual safety device to identify the sensor according to the measurement, the calibration is simple and integrated into the instrument. Registration for expertise.

#### Contents:

- 1 TFT color display tester 7" with resistive touch screen
  - battery: lithium polymer 3.7V / 2000mA
  - USB smart battery charging with LED indicator
  - PC connection via USB port
  - ABS case with rubber bumpers
  - all screws are mounted on brass inserts
  - 1/4 thread brass insert at the back to fix the bracket
  - 1 sensor 0/300 bar (2m)
  - 1 sensor -1/+3 bar (2,90m)
  - 1 universal diesel compression adapter
  - 1 universal fuel compression adapter
  - 12 quick connectors, original manufacturer, extremely flexible
- All components are available at retail



## AC 0801

### HIGH-PRESSURE KIT

Accessory of AC 0800



#### Contents:

- sensor 2000 bar (2m)
- sensor cap for direct pump pressure,
- 2 hoses M12x150 for the most common applications.
- recovery tank



## AC 0802

### COMMON RAIL PLUGS KIT

Accessory of AC 0800



#### Contents:

- 6 plugs M12x150
- 6 plugs M14x150

#### Applications:

- 3, 4, 5 and 6 cylinder engines



## AC 0803

### COMMON RAIL DUMMY REGULATOR KIT

Accessory of AC 0800



## HU 4030

### MALE CONNECTOR SCANIA VOLVO ZF



## HU 4031

### FEMALE CONNECTOR SCANIA VOLVO ZF





AC 5280

8-CYLINDER COMMON RAIL INJECTOR TESTER

Covers the majority of vehicles with Bosch Common Rail injectors (excluding Opel), Denso, Delphi and Siemens. This composition allows to detect problems of injector flow rate.

Adapters for Bosch, Delphi and Denso injectors.



- A) The engine runs without starting.  
The placement of the graduated pencils allows you to diagnose:
- if all levels are similar:  
The injectors are working properly.
  - if one level is found to be significantly higher than the others (25%), this injector is damaged
- The method is faster:
- direct connection to the injector
  - the fuel penetrates directly into the rods.
- B) The engine starts.  
The use of vials is recommended.  
If an excessive flow is found in one of the vials, replace the injector connected to this vial.



SA 5240	6 CRAYON SET
SA 5242	24 CONNECTOR SET
SA 5281	SET OF 8 VIALS + HOLDER + HOSES



Foaming penetrating formula, dissolves calamine and soot.

CO 1025

INJECTOR/GLOW PLUG RELEASER 500ml

Accessory of OP 9210

Allows injectors and glow plugs which have seized up due to calamine and soot to be released.  
Can also be used to clean turbos, EGR valves and exhausts.

Also available in box of 12





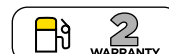
## INJECTORS PULLER

**OM 9261**

### LCV/HGV INJECTOR-HOLDER REMOVAL WRENCH

Set of 4 pins sockets for the removal of injector holders on some commercial vehicles and HGVs.

- 1/2" D. 4 pin socket L.72mm: Mercedes OM Series 401/421, 403/423, LA, A, 470
- 32mm D. 4 pin socket L.70mm: Mercedes, Neoplan, Setra
- 1/2" D. 3 pin split socket L.120mm: Mercedes, MAN
- 32mm D. 4 pin socket L.120mm: MAN, Mercedes



TN

**OM 0070**

### 1/2" D. SOCKET SET FOR INSTALLING/REMOVING INJECTOR HOLDERS



**Contents:**

- SA0081: 1x22mm hex socket L.110mm with window
- SA0082: 1x22mm double hex socket L.78mm with window
- SA0083: 1x27mm double hex socket L.78mm with window
- SA0084: 1x28mm double hex wrench L.78mm with window



TN

**OM 0071**

### 1/2" D. HEX SOCKETS SET FOR REMOVING DIESEL INJECTORS HEADS



**Contents:**

- SA0011: 1/2" D. split socket 25mm
- SA0781: 1/2" D. split socket 27mm
- SA0012: 1/2" D. split socket 29mm
- SA0014: 1/2" D. split socket 30mm



TN

**OM 0080**

### DIESEL INJECTOR LINE SOCKETS 1/2" DOUBLE HEX Ø12-14-16-17-18-19mm



BMW/VAG/MERCEDES



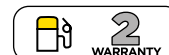
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**OM 6058**

### 1/2" D. 58T PRE-CHAMBER SOCKET DIESEL ENGINES



Suitable for diesel engines Opel 2.0DI, 2.2 DI with OEM codes X20DTL, X20DTH, X22DTH, Mercedes CDI, 601, 602, 603, 605, 606, 661, 662



TN

**OM 4033**

**SLIDE HAMMER 7.5kg**

Designed to furnish high impact forces, it is used by placing both hands on the sliding weight.

Shaft threaded at both ends 5/18" UNF thread at one end and metric M18x1.5 at the other making it compatible with injector adapters, hub extractors, etc.



**Specifications:**

- total length 765mm
- shaft length 660mm
- weight of inertial extractor: 7.5kg
- double threaded shaft to suit adapters: 5/18" UNF



**OM 4224**

**INJECTOR ADAPTER M18x1.5**

Accessory of OM 4033/OM 4222

This ball joint was designed for inertial weight OM 4022 and OM 4033 for injectors that have seized up or blocked, facilitating the access to the extractor on vehicles where this is not difficult to access.

Examples: Espace, Scénic, C4 Picasso... with advanced windscreen bay.



**OM 9277**

**ELECTRODE REMOVAL WRENCH 1/2"**

Spare part of OH 0027/OM 5310



Hex 10mm

Allows you to remove the internal electrode of Bosch common rail injectors



**OM 4202**

**ADAPTERS FOR BOSCH AND DELPHI INJECTORS**

Accessory of OM 4033

**Contents:**

- bosch Adapter M20xM17x1.0
- delphi adapter M20xM14x1.5
- electrode removal wrench hex Ø10mm
- reducer M20x5/8" UNF





TN

**OM 4022****INERTIAL INJECTOR EXTRACTOR BOSCH/DELPHI**

Allows fast and effortless extraction of the blocked injectors in the cylinder head.

**Contents:**

- slide hammer 3.5kg
- inertial extraction rod M18x1.5 L.280mm
- inertial extraction rod M18x1.5 L.360mm
- SA9026: fork 16mm for extractor
- SA4222: adapter M18-M20x1.5
- SA4026: adapter M18-M22x1.5
- SA4027: inertial adapter Bosch injectors

SA 9026	FORK Ø16mm FOR EXTRACTOR
SA 4026	ADAPTER M18x1.5-M22x1.5
SA 4023	EXTERNAL GRIP ADAPTER BOSCH INJECTORS
SA 4027	INERTIAL INJECTORS ADAPTER BOSCH

**OM 5084****INJECTOR EXTRACTION LEVER  
M12x1.00 MALE**

Accessory of OM 5081/OM 5085/SA 5080/SA 5083/OM 5083



- allows the injector to be unblocked.
- screws onto the connector to the fuel supply line.
- no injector disassembly required, can be reused if still functional.

For Bosch / Delphi  
(M12x1.00) / Denso /  
Siemens injectors



TN

**OM 5083****INJECTOR EXTRACTION LEVER  
M12x1.5 FEMALE**

Accessory of OM 5081/OM 5085/SA 5083/SA 5080/OM 5084



- allows the injector to be unblocked.
- screws onto the connector to the fuel supply line.
- no injector disassembly required, can be reused if still functional.

For Bosch / Delphi (M12x1.5)  
/ Denso / Siemens injectors



TN



**OP 1480**

**PNEUMATIC CHISEL TOOLS**



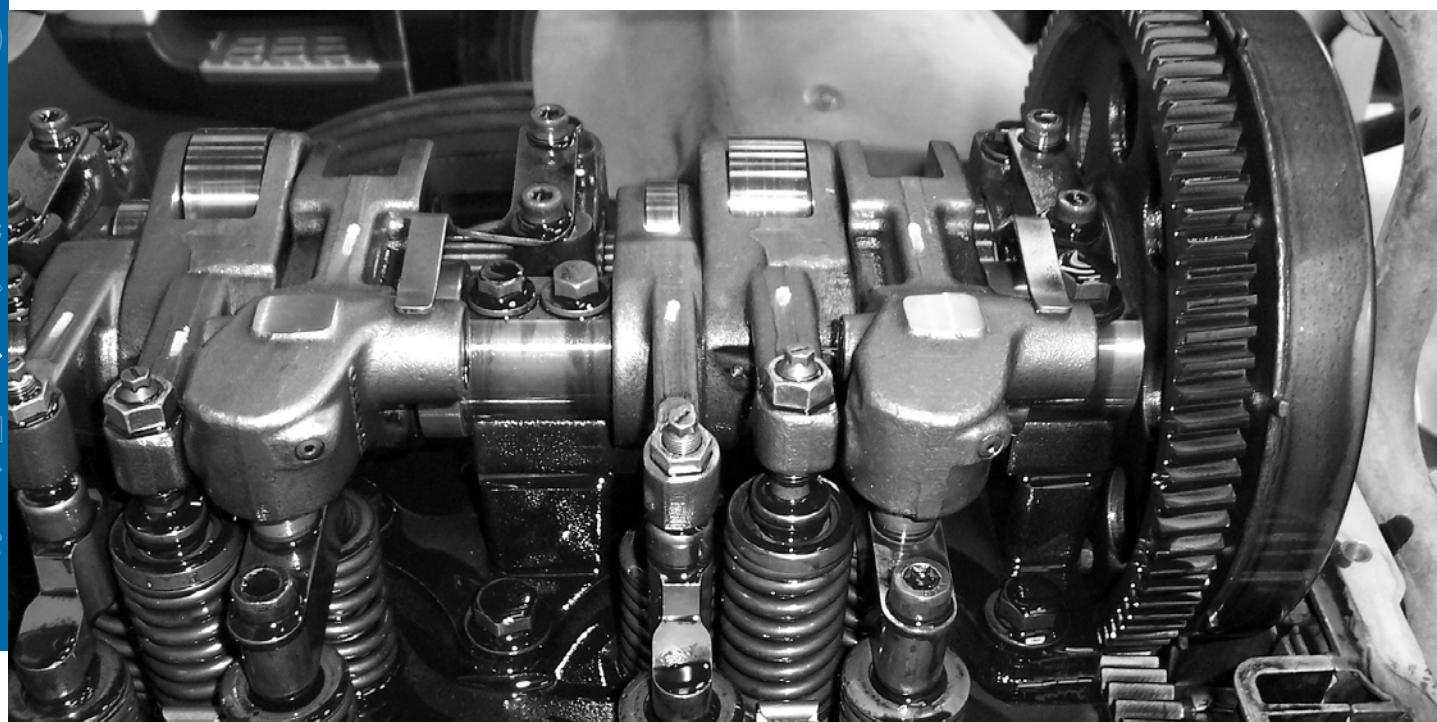
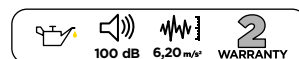
Chisel set for an easier removal of corroded, seized or crimped parts.

**Specifications:**

- capacity: 2200bpm
- operating pressure: 5 to 8bar
- consumption: 114l/min
- noise level 100dB

**Contents:**

- SA1480: chipping/chisel hammer
- SA1481: adapter for 1/2" D. impact sockets
- SA1482: adapter for Ø38-63-74mm blocks
- SA1483: circular shaped block Ø38mm
- SA1484: rounded hollow block Ø63mm
- SA1485: circular shaped block Ø74mm
- SA1486: circular shaped block Ø25mm
- SA1487: rounded hollow block Ø25mm
- SA1488: 10pcs O-rings



**OM 9366**

**INJECTOR EXTRACTOR RENAULT/NISSAN/OPEL 2.0-2.2-2.5 DCI**



**Contents:**

- SA9266: injector extractor Renault
- SA9269: Renault Master adapter
- SA9271: optional Renault support

**Models:**

Renault: Mégane 2-3, Scénic 2-3, Vel Satis, Laguna 2-3, Espace 3-4, Master 2-3, Trafic 2-3, Koleos  
Opel: Movano, Vivaro

Nissan: Interstar, Primastar, Kubistar

**Engines:** 2.0-2.2-2.5 DCI

**Codes:** G9T, G9U, M9R

Injectors: Bosch, Bosch Piezo, Siemens, Siemens Piezo





**OM 9276****INJECTOR EXTRACTOR PSA 2.0-2.2 HDI**

Injectors: Bosch, Siemens

Models:

Peugeot: 307, 307cc, 308, 407, 407 coupé, 607, 806 (16V), 807, Expert

Citroen: C4, C5 II, C5 III, Sinergie, Evasion, Dispatch, Jumpy, C8

Fiat: Ulysse, Scudo

Lancia: Phedra, Zeta

**Engines:**

PSA: 2.0 HDI (only 16V), 2.2 HDI

Fiat/Lancia: 2.0 JTD, 2.2 JTD

**Codes:** RTH, RHW, 4HW, RHT, RHM, RHR, RHK

**OP 9210****VIBRATION PNEUMATIC PULLER FOR EXTRACTION INJECTORS**

Accessory of OH 0027/OH 0025/OM 9250/OM 9366

Allows the take-off of seized injectors in all simplicity and autonomy.  
Optimum efficiency coupled with a hydraulic or manual extractor, to apply traction on the injector simultaneously with vibrations.

**Specifications:**

- average duration of use: 15min bursts
- max. pressure: 6.3bar
- no operator required after installation and start-up

**Contents:**

- pneumatic vibrator with regulator
- pair of inclined jaws
- pair of orthogonal jaws
- clamping screws jaws

**Option:**

- CO1025: injector/glow plug releaser 500ml
- OH0027: universal injector mechanical-hydraulic extraction kit

**OM 9441****INJECTOR PULLER VOLVO/RENAULT/MAN/DAF****Engine codes:**

VOLVO D13-D16

MAN TGA 460-480 , TGS

MOTEUR D2676 EURO 5 , BE , CE , FR , GR

DAF CF65 , CF65II , CF65IV , LF45 , LF45IV , LF55 , LF55IV





**OM 5310**
**INJECTOR EXTRACTOR KIT MERCEDES/CHRYSLER 2.1-2.2-3.0 V6 CDI**

This kit allows the removal of Bosch and Delphi injectors mounted on 2.1, 2.2 and 3.0 V6 Mercedes and Chrysler engines.

These tools allow the operator to access difficult to reach areas without dismantling the cylinder head.


**Models:**

Mercedes: Vito, Vario, CLK, Sprinter, Viano, Classe M, GL, C, GLK, E, CLS, S, R, G  
Chrysler: 300 C

**Engines:**

Mercedes: 2.1, 2.2, 3.0 V6  
Chrysler: 3.0 V6

**Contents:**

- SA9276: main body with extractor M18x1.5-M17x1 Bosch (2.1-2.2)
- extractor screw M18x1.5-M14x1.5 Delphi (3.0V6)
- 1/2" D. Injector socket double hex 29mm
- OM9277: 1/2" D. Injector socket hex 10mm
- extraction device (2.1-2.2)
- extraction supports (3.0V6)


**OM 0075**
**INJECTOR EXTRACTION KIT MERCEDES CDI**


Models: Sprinter-Vito-Viano-Vario

Up to 2000

Engine codes: OM0611/OM0612/OM0613/OM0646/OM0647/OM0648


**OM 9442**
**2 ADJUSTMENT JIGS FOR SCANIA PUMP INJECTORS**


Allows height adjustment (66.9mm) when installing the BOSCH injector type PDE 31/PDE 32 on 12 and 16L motors.

Engine codes:

OEM 99442 / 99414


**OM 9432**
**REMOVAL ELECTRODE SOCKET INJECTORS HPI SCANIA PUMP (BOSCH)**

**OM 9433**
**INJECTOR SOCKET MAN Ø28mm DOUBLE HEX**

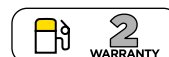

This socket is machined to disassembly the power supply of injectors mounted on MAN TGA 460-480cv.

Engine: D26 euro 5 SCR



**OM 9443****INJECTOR EXTRACTOR MAN**

For Common Rail TGL injectors on Euro 3-4-5/TGA/TGM/TGX engines.

**OM 9410****INJECTOR LINER APPLICATION TOOL VOLVO/RENAULT 7-9L****OM 9411****INJECTOR LINER APPLICATION TOOL VOLVO/RENAULT FH-FM**

Accessory of OM 9412



For 12-13 and 16L engines.

**OM 9412****INJECTOR LINER APPLICATION TOOL VOLVO/RENAULT FH-FM**

Accessory of OM 9411



For 9-11-12-13 and 16L engines.

**OM 9420****INJECTOR LINER APPLICATION TOOL PDE SCANIA****OM 9421****INJECTOR LINER APPLICATION TOOL XPI SCANIA****OM 9422****INJECTOR LINER APPLICATION TOOL HPI SCANIA****OM 9275****INERTIAL INJECTOR GASKET EXTRACTOR**

## WELL & INJECTOR SEAT CLEANING

### OM 9110

#### COMPLETE INJECTOR SEAT CLEANING KIT

This kit allows you to clean injector seats and wells.  
The depth-adjustable reamer support allows you to reshape the gasket seat without damaging it.



#### Contents:

- OM9280: 1 injector gasket extractor
- 1 reamer support
- SA9100: 1 brush drive line
- SA9110: 2 small diameter injector well brushes
- SA9111: 2 large diameter injector well brushes
- 1 brush support
- 6 injector well plugs
- 13 reamers (9 flat, 4 conical)
- 1 flat reamer L.14mm Ø14mm
- 1 flat reamer L.15mm Ø19mm
- 1 flat reamer L.15.5mm Ø15.5mm
- 5 flat reamers L.17mm Ø17-17.5-19-19.5-20mm
- 1 flat reamer L.19 Ø21.5mm
- 1 conical reamer L.15.5mm Ø15.5mm
- 2 conical reamers L.17mm Ø17-21mm
- 1 conical reamer L.17.5mm Ø20.5mm
- 1 hexagonal wrench 2.5mm
- 1 T-handle and 170mm extension
- 1 cleaning tool L.250mm Ø15.5mm



WARRANTY

### OM 9100BL

#### INJECTOR SEAT CLEANING KIT

This kit allows you clean injector seats and wells.  
The depth-adjustable reamer support lets you reshape the gasket seat without damaging it.



#### Contents:

- 1 injector gasket extractor
- 1 reamer support
- 1 brush drive line
- 2 injector well brushes Ø8mm
- 2 injector well brushes Ø20mm
- 1 brush support
- 6 injector well plugs
- 2 flat reamers Ø17mm
- 1 conical reamer Ø17mm



WARRANTY



**OM 0666****BORE BRUSH SET**Steel-Nylon-Brass  
Ø8 to Ø19mm

SA 0618	10 PCS Ø18mm NYLON BRUSH SET
SA 0619	10 PCS Ø19mm NYLON BRUSH SET
SA 0628	10 PCS Ø18mm METAL BRUSH SET
SA 0629	10 PCS Ø19mm METAL BRUSH SET
SA 0638	10 PCS Ø18mm BRASS BRUSHES SET
SA 0639	10 PCS Ø19mm BRASS BRUSHES SET

**NO**  
WARRANTY**CO 1005****PETROL INJECTOR CLEANER 300ml**

High-performance fuel treatment:

- dissolves polluting deposits (calamine, gum, varnish...) for clean combustion for optimal performance
- lubricates and protects cylinders
- cleans the injection system



The injection cleaner can be used both as a preventive measure (to protect the injection circuit) and as a curative measure.

- preventive use: 1 bottle for 80l
  - curative use: 1 bottle for 40l
- If you have never treated your vehicle before and if the first symptoms of injection malfunction are presenting themselves, the injection cleanser will allow you to deep clean the system.

Also available in box of 24

**CO 1010****DIESEL INJECTOR CLEANER 300ml**

High-performance fuel treatment for direct injection diesel engines, common rail...

- dissolves polluting deposits (calamine, gum, varnish, combustion residues...) for clean combustion for optimal performance
- lubricates and protects mobile parts in diesel engines
- facilitates cold-starts
- cleans the injection system



The injection cleaner can be used both as a preventive (to protect the injection circuit) and as a curative measure.

- preventive use: 1 bottle for 80l
  - curative use: 1 bottle for 40l
- If you have never treated your vehicle before and if the first symptoms of injection malfunction are presenting themselves, the injection cleanser will allow you to deep clean the system.

Also available in box of 24



## CYLINDER HEAD DIAGNOSTICS

### AC 3300

#### CO2 DETECTION KIT



- checks for gas combustion in the radiator
- the test fluid changes colour if a leak is detected
- fast identification of defective head gasket

1- With the engine hot, take off the radiator cap or the expansion-tub cap and pour in the indicated dose of the tracking fluid.

2- Put the bulb on the tube and squeeze it several times. Any gas in the cooling system mixes with the tracking fluid. The blue tracking fluid changes color (turns yellow) if there is an internal combustion fault that forces CO2 into the cooling fluid. Conclusion: problem with the cylinder head gasket.

AC 3350 CO2 DETECTION FLUID

Spare part of AC 3300

2  
WARRANTY

TN

### OM 5026

#### MECHANICAL STETHOSCOPE



Very simple diagnostic tool for listening to engines, cylinder heads, gearboxes, bearings... Made with steel and plastic, this tool is oil proof and complements researching sounds which are otherwise difficult to discern.

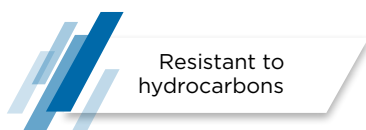
- extended steel probe: 290mm
- total length: 1100mm

2  
WARRANTY

TN

### CO 1020

#### BLACK SEALANT CARTRIDGE -40/+250 DEGREES 200ml



Resistant to hydrocarbons

Allows joints to be sealed (sump, water pump, gearbox) and mechanical parts (fuel pumps, carburetors).

Also suitable for sealing headlights and electrical connections. Even adhesive in oil. Slow skin formation (20 minutes) to work serenely during major operations (gear box turning type).

#### Specifications:

- elastomer: 400% elasticity
- resistant to high temperatures (250°C)
- drying by touch: 20min
- vacuum package, with trigger

Also available in box of 12

200 ml NO WARRANTY

### CO 1014

#### 300 ml ENGINE LEAK STOP



Also available in box of 24

300 ml NO WARRANTY

**AC 0010****STRAIGHT EDGE FOR CHECKING CYLINDER HEAD FLATNESS 600mm**

Allows you to simply and precisely check for unevenness in surfaces such as the cylinder head or individual cylinder heads. Allows you to check up to 6 cylinder heads.



- tolerance: < 0.05mm
- material: Carbon steel SC50C
- dimensions: L.600xW.36xH.16mm

**AC 0011****STRAIGHT EDGE FOR CHECKING CYLINDER HEAD FLATNESS 400mm**

Strong ribbing ensures high rigidity  
Reinforced edges

**Specifications:**

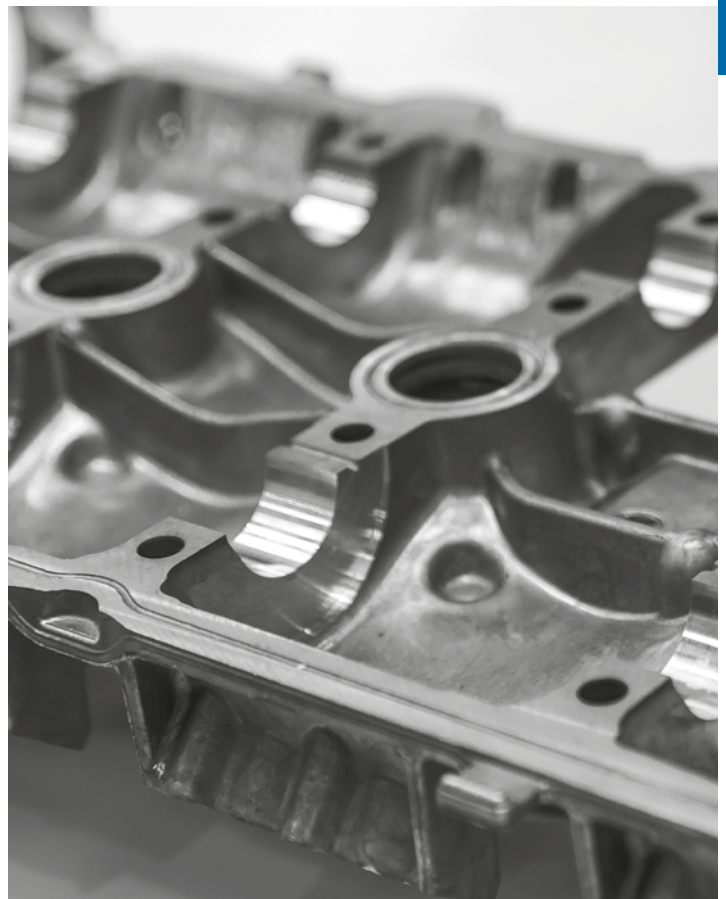
- tolerance: < 0.05mm
- material: steel
- dimensions: L.400xW.40xH.8mm
- DIN 875

**AC 0517****EXTERNAL MICROMETER 0-25mm****Specifications:**

- tempered steel touch
- metal contact surface
- matt chrome-plated body, antireflection
- locking by lever

**AC 0528****MICROMETER 25-50mm****EG 1560****CAST IRON SURFACE PLATE FOR CHECKING HEAD FLATNESS****Specifications:**

- strong ribbing for high rigidity
- reinforced edges
- tolerance: < 0.05mm
- weight: 80kg
- dimensions: L.800xL.500xH.90mm
- DIN 876



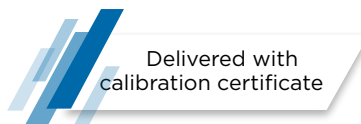


**AC 0513****CALIPER TOOL****Specifications:**

- from 0 to 150mm
- resolution 1/20mm
- depth gauge
- locking knob

**AC 0511****DIGITAL CALIPER****Specifications:**

- from 0 to 150mm
- resolution: 0.01mm
- reset in any position
- battery LR44 supplied

**AC 0520****COMPARATOR+MAGNETIC BASE PACK****Comparator specifications (AC0514):**

- measurement range 0 to 10mm
- travel/turn: 1mm
- resolution 0.01mm
- chromed-steel case Ø57mm
- fixing rod Ø8mm
- point zero locking screw

**Magnetic base specifications (AC0515):**

- joint locking
- magnetic base, attraction strength 80kg
- height: 235mm
- vertical stalk Ø12mm
- weight: 1,850kg

**AC 0518****FEELER GAUGE SET****Specifications:**

- 20 blades
- 0.05 to 1mm
- resolution: 0.05mm

**AC 0530****50-160mm DRILLING INSPECTION DEVICE SET**

Allows to check the ovalization flaws of a drill hole from 50 to 160mm

**Contents:**

- 0.01mm resolution comparator
- cardan drill checker
- 12 pins L.50 to 105mm

**OM 0112****MOUNTING GUIDE CYLINDER SET  
VOLVO/RENAULT 11-12-13-16L****OM 4528****IMPACT SOCKET E28 3/4" L 90mm  
CYLINDER HEAD FOR MAN/SCANIA**

# VALVE SPRINGS

## OM 0104

### SPRING LIFTER VALVE SET



Without disassembly  
of the cylinder head

#### Contents:

- 1 valve spring lifter
- 3 mounting brackets
- 4 compression cups  
Ø24, 28, 30, 36mm



2  
WARRANTY

## OP 0102

### PNEUMATIC VALVE GRINDING TOOL

This device grinds the valves automatically and perfectly evenly, by rotating alternately to the right and the left.

All the rotating parts are precisely tooled, ensuring that the device has a long life.

Sold in a plastic box complete with suction cups and sockets so that the valves can be picked up by the stem or the head. Shaft speed adjustment carried out by increasing or decreasing the air flow.



Pneumatic grinding tool supplied with:

- SA6955: 1 rubber suction cup Ø22mm
- SA6956: 1 rubber suction cup Ø33mm
- SA6957: 1 rubber suction cup Ø40mm
- 1 articulated tip door socket
- supplied in a box

2  
WARRANTY

## OM 0109

### UNIVERSAL VALVE LIFT HGV/INDUSTRIAL VEHICLES



2  
WARRANTY

## OM 0103

### VALVE SPRING LIFTER

Can be used generally on a wide variety of engines (OHC, OHV et CVH)

Designed for petrol and diesel engines



- opening capacity 55-175mm, height under groove 165mm
- SA0103: reversible valve spring lifter adapter Ø25 & 30mm

2  
WARRANTY

## OM 0614

### 2 VALVE LAPPING TOOL SET

Suction cups: Ø15, Ø19, Ø27, Ø35mm



NO  
WARRANTY

## OM 0106

### VALVE STEM SEAL DISMOUNTING PLIERS



2  
WARRANTY

## PISTON & CYLINDER

### OM 0154

PISTON RING  
COMPRESSOR Ø65-135mm  
H.100mm



### OM 0155

PISTON RING  
COMPRESSOR Ø90-175mm  
H.165mm



### OM 0159

PISTON INSERT GUIDE  
DAF



Conical interior Ø139  
to 129mm.



### OM 7450

CYLINDER LINER APPLICATION  
TOOL 60-160mm



Internal plug Ø60 to  
160mm



### OM 0503

EXPANDING ENGINE  
CYLINDER HONE



#### Specifications:

- adjustable from Ø50 to Ø180mm
- SA5503: 100x11mm stones 3pcs
- grit 240 medium

SA 5503 3 STONE SET



### AC 0118

UNIVERSAL CYLINDER LEAK DETECTOR TESTER



This tool allows the seal of the cylinders to be tested without the need to open up the engine. It is one of the simplest and fastest tests to use to check the engine's condition. Air is injected through the plug well into each cylinder, and the dial indicates if there's any pressure loss. Engine compression leaks can damage valves, wear segments, crack the cylinder head gasket or the cylinder head.

The adapters supplied with this leak tester fit with all the plug wells (10, 12, 14, 18mm) and the long adapter (220mm) is very useful for the plugs with deep wells.







### AC 0224

## COMPRESSION MEASURING KIT FOR DIESEL ENGINES

Easy and ready to use, this kit covers 90% of vehicles.  
Applications available on request.

AC0200 : 1 x compresseur enregistreur moteurs diesel  
AC0204 : 1 x coffret fausses bougies diesel



### AC 2018BL

## MULTI-BRAND COMPRESSION GAUGE PETROL-DIESEL/DCI

Complete set for petrol and diesel engines with  
direct and indirect injection.

#### Specifications:

- quick connector adapter
- 1.400mm hose for difficult access points
- 0 to 40bar manometer with release valve

**B.LINE**



PSA, VAG, Alfa, BMW, Chrysler, Daewoo, Daihatsu, Fiat,  
Ford, Honda, Hyundai, Isuzu, Jeep, Kia, Lada, Lancia, Land  
Rover, LDV, Mazda, Mercedes, MG, Mitsubishi, Nissan, Opel,  
Renault, Rover, Saab, Ssangyong, Suzuki, Toyota, Volvo.



### AC 2024

## DIESEL GLOW PLUG KIT

Accessory of AC 0200/AC 0118/AC 2016/AC 0800

Glow-plug kit (diesel and common rail) that can connect to  
AC0200 compression gauges and AC0118 seal sensors.

Covers 90% of vehicle - applications available on request.



### AC 2021

## UNIVERSAL DUMMY INJECTOR

Accessory of AC 0200/AC 2024/AC 0224/AC 0800

Universal dummy injector, can be mounted in place of the  
original injector for engine compression.



Universal, 5 in 1



#### Contents:

- dummy injector body
- 5 adapters/nose injectors
- 7 injector length adjustment spacers
- 3 fixing flanges
- spare copper gasket pouch

#### Adapters/Nose:

- Ø16.75mm without nose
- Ø16.75mm nose Ø6.65mm
- Ø20.55mm nose Ø13.65mm
- Ø23.70mm nose Ø13.65mm
- Ø23.75mm nose Ø5.75mm



# FUEL PLIERS

**OM 9398**

## FAST FUEL CONNECTORS CLAMP

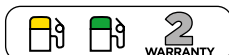
Specially designed for quickly unplugging connectors and fast connections with 2 buttons laterally accessible (fuel lines, ADblue, depressions, etc.)


**Specifications:**

- opening: 3 to 32mm
- torque locking system


**OM 0504**

## PETROL AND DIESEL FUEL CONNECTION PLIER



## FUEL FILTER WRENCHES

### OM 0316

GAZOLE FILTER WRENCH  
Ø95mm 14-SIDED



**Applications:**  
Man F2000, TGA, TGV



### OM 9210

3/8" ADBLUE D. FILTER WRENCH  
Ø46mm MERCEDES BLUE-TEC



### HU 2027

DIESEL FUEL FILTER REMOVAL KIT OPEL/FIAT/  
PSA/SUZUKI/SAAB/LANCIA

This removal diesel fuel filter parts was created for removal and replacement of filter element without any risks of harming the filter's plastic body.

This housing is not disposable and supplied filter is only a replacement element.

This kit is composed with 2 pieces:

- A vice holder for external body of filter to hold it securely
- An adaptor which is positioned on the top of the housing to allow release with a 1/2" square

#### Applications:

Chevrolet, Citroën, Fiat, Saab,  
Suzuki, Vauxhall, Opel, Lancia

#### Engines:

1.3 JTD-CDTI-DDIS-MJTD  
1.9 JTD-CDTI-TID  
2.0 VCDI-HDI-JTD  
2.2 JTD-HDI  
2.3 JTD  
2.8 JTD-HDI  
3.0 JTD-HDI



### OM 9267

FUEL FILTER WRENCH PSA/  
RENAULT 3/8"



Ø108mm



### OM 9336

FUEL FILTER WRENCH 3/8" FORD TRANSIT/MONDEO  
2.2i TDCI



Specially designed to install and remove fuel filters on Ford Mondeo and Transit 2.2i TDCi >2012.

Does not damage the filter receiver, ensures correct and leak-free reassembly.

Drive: 3/8"





## FUEL FILLING

**HU 0010BL**

STRAP WRENCH  
DEHYDRATING CARTRIDGE

**B.LINE**



Length of the strap:  
500mm



**HU 0008**

HGV STRAP WRENCH 1/2"



Do not damage filters



**Specifications:**

- max capacity: Ø150mm
- strap L.700mm, largeur 50mm
- drive 1/2"



**HU 0014**

METAL STRAP WRENCH FOR  
DESICCANT CARTRIDGE



- Ø min: 125mm
- Ø max: 140mm
- drive: 1/2"



**OM 9339**

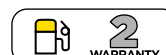
FUEL FILTER WRENCH Ø109mm PSA/  
RENAULT 3/8"

Specially designed for mounting/removing plastic covers when  
replacing fuel filters.

**Specifications:**

- Ø109mm
- 8 pins
- 3/8" drive
- can be tightened with a torque wrench
- doesn't damage the cartridge or its holder
- ensures watertightness

Affectations :  
PSA, Renault



**AC 4097**

DIESEL STARTING BLEEDING PNEUMATIC KIT



Makes easier restart,  
Ford compatible



**Contents:**

- OP0053BL: pneumatic vacuum brake bleeder
- AC4096: diesel starting bleeding kit



# LPG

## AC 9901

### LPG DETECTION KIT

FOR USE IN TECHNICAL INSPECTIONS AND BY LPG SPECIALISTS

A specially-designed case to detect leaks in LPG vehicles.  
This leak detector has a flexible probe to reach the most difficult places.  
Leaks are indicated by visual and sound signals whose frequency increases closer to the leak: a fast, efficient means of locating leaks with precision.

#### Contents:

- OM8074: telescopic mirror 228mm-715mm
- AC6498: round magnifying glass ø75mm
- SA6500: leak detector spray ph neutral
- SA9801 (x2): pre-cut foam
- SA9901: grey case
- OE0145BL: ultra fine rechargeable hand lamp with variable intensity
- AC8497: gas leak detector



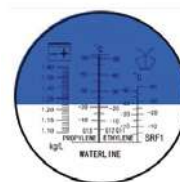
Meets the latest directives for technical inspections.



# ADBLUE®

## AC 4066

### REFRACTOMETER



For checking:

- cooling liquid 0 to -50°C
- battery liquid density: 1.1 to 1.4kg/l
- windshield washer liquid 0 to -40°C
- adBlue



## OM 9210

### 3/8" ADBLUE D. FILTER WRENCH Ø46mm MERCEDES BLUE-TEC



## HU 0640

### ADBLUE DISTRIBUTION DEVICE

Spare part of HU 0670



- Suitable for all kinds of transfer installations, even those which operate with gravity
- Simple and economical
- Excellent functioning thanks to low flow resistance

Equipped with lever protection with trigger blocking system (can be removed).



## HU 0013

### ROTARY PUMP SUITABLE FOR ADBLUE

Special pump to transfer AdBlue. Also suitable for other fluids like water, diesel, oil...



#### Specifications:

- supplied with a 2" bsp fitting
- 0.3 litre per crank turn
- inlet tube 1000mm
- fixing Ø59mm thread 200





# CONVERSIONS



1 inch (in) = 1 pouce = 2,54cm  
 1 foot (ft) = 1 pied = 30,48cm  
 1 yard (yd) = 1 verge = 0,9144m  
 1 mile (mi) = 1 mille = 1,6093km  
 0,6214mile = 1 kilomètre  
 1 nautical mile = 1 mille marin = 1,852km



1 ounce (oz) = 1 once = 28,3495g  
 1 pound (lb) = 1 livre (UK) = 0,4536kg  
 1 short ton (tn) = 1 tonne courte (US) = 0,9072t  
 1 long ton (tn) = 1 tonne forte (UK) = 1,0160t  
 1 hundredweight (US) (cwt) = 0,4536quintal  
 1 hundredweight (UK) (cwt) = 0,5080quintal



1 square inch (sq.in) = 1 pouce carré = 6,4516cm<sup>2</sup>  
 1 square foot (sq.ft) = 1 pied carré = 9,2903dm<sup>2</sup>  
 1 square yard (sq.yd) = 1 verge carré = 0,8361m<sup>2</sup>  
 4840 square yard (sq.yd) = 1 acre = 0,4047ha  
 1 square mile (sq.mi) = 1 mille carré = 2,590km<sup>2</sup>



100kPa = 1 bar = 14,503psi  
 1,01325bars = 1 atm = 101,325kPa

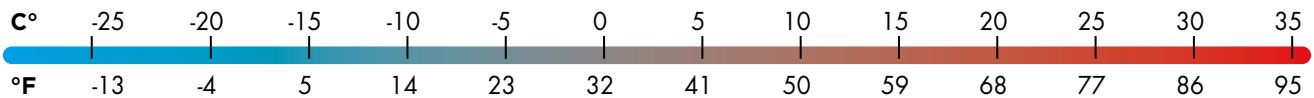


1 cubic inch (cu.in) = 1 pouce cube = 16,3872cm<sup>3</sup>  
 1 cubic foot (cu.ft) = 1 pied cube = 28317cm<sup>3</sup>  
 1 cubic yard (cu.yd) = 1 verge cube = 0,7646m<sup>3</sup>  
 1 once (US) (fl.oz) = 0,0296l  
 1 once (UK) (fl.oz) = 0,0284l

1 quart (US) (qt) = 0,9463l  
 1 quart (UK) (qt) = 1,1365l  
 1 gallon (US) (gal) = 3,7853l  
 1 gallon (UK) (gal) = 4,5460l  
 1 barrel of oil = 1 baril de petrol = 0,1590m<sup>3</sup>



1 C° = 5/9 (°F-32)  
 Conversion Celsius to Fahrenheit : C° = 5/9 (°F-32)



## TIGHTENING TORQUE CONVERSION TABLE

The international unit is Nm (Newton x meter)

### CONVERT Nm

1Nm = 0,102Mkg  
 1Nm = 0,738Ft-lbs  
 1Nm = 8,851In-lbs  
 1Nm = 141,84In-Oz

### CONVERT Ft-lbs

Foot-pound in Newton meter: 1Ft-lb = 1,35 Nm  
 Foot-pound in mètre kilo: 1Ft-lb = 0,138 Mkg  
 Foot-pound in Inch-pound: 1Ft-lb = 12 In-lbs

### CONVERT In-lbs

1 In-lbs = 0,1128Nm  
 1 In-lbs = 0,015Mkg  
 1 In-lbs = 0,083Ft-lbs  
 1 In-lbs = 15,873In-Oz

## INGRESS PROTECTION RATING

### 1st digit: Solid particle protection

































- 0 No protection
- 1 Protected against solid particles superior to 50mm
- 2 Protected against solid particles superior to 12mm
- 3 Protected against solid particles superior to 2,5mm
- 4 Protected against solid particles superior to 1mm
- 5 Dust protected
- 6 Dust tight

### 2nd digit: Liquid ingress protection











- 0 No protection
- 1 Protected against dripping water
- 2 Protected against dripping water when tilted up to 15° from the vertical
- 3 Protected against spraying water when tilted up to 60° from the vertical
- 4 Protected against splashing water jets from any direction
- 5 Protected against water jets from any direction by a nozzle
- 6 Protected against powerful water jets from any direction
- 7 Protected against immersion
- 8 Protected against long-lasting immersion according to specified conditions

# LEGEND

## GENERAL

	Highlighted product		LCV/HGV		Product with electrical plug
	Warranty period		LV/LCV		Petrol
	No warranty		Power		Diesel
	Lifetime warranty		Decibel level		ADblue®
	IP rating		Vibrations		Quicklift device (lifting range)
	Professional IP rating		Cable/hose length		Low profile
	Magnetic		Capacity		LED quantity
	Powered by battery		Maximum load		COB LED
	Impact wrench use recommended		Use oiler		Tension
	Product for R134a air conditioning gas		Product for air conditioning gas R1234yf		Motorization
	Tariff Normal		Tariff Equipment		

## RECESSES

	Flat		Double Hex female		Ribe		XZN
	Square		Torx		Ribe female		XZN female
	Phillips		Torx E		Ribe tamperproof		Superlock
	Hex		Torx tamperproof		TS		End ball Hex
	Hex female		Torx plus		TS plus		Pozidrive
	Hex tamperproof		Torx plus female		TS plus female		

PHILLIPS®: registered trademark of Phillips Screw Co.®  
 TORX®: registered trademark of Camcar / Textron, Texas  
 XZN®: registered trademark of Bauer-Schulte  
 RIBE®: registered trademark of Richard Berger  
 POZIDRIV®: registered trademark of European Industrial Services  
 Collier Clic®: registered trademark of CAILLAU  
 Circlips®: registered trademark of Nomel

Blackson®: registered trademark of Henkel Loctite  
 Haldex®: registered trademark of Haldex Traction Systems  
 AdBlue®: registered trademark of Verband der Automobilindustrie e.V. (VDA)  
 VITON®: registered trademark of DuPont Performance Elastomers L.L.C.  
 OETIKER®: registered trademark of Oetiker Schweiz AG  
 NTN-SNR®: registered trademark of NTN-SNR Bearings.

# TERMS AND CONDITIONS OF SALE

CLAS Equipements - Terms and conditions of sale

## Article 1 - PREAMBLE

Purpose of these conditions of sale ("General Terms and Conditions" or "T&C") is to define the respective obligations and responsibilities of CLAS Equipements and its clients acting within the framework of professional activity (hereinafter the "Client(s)") in their pre-contractual and contractual relationships related to the sale of supplies by CLAS Equipements. The term "Supply(ies)" refers to the services, systems, materials and products sold by CLAS Equipements. These T&C are the reference documentation basis of the commercial relationships between CLAS Equipements and Clients.

These T&C prevail over the general conditions of purchase of the Client except with the prior and express written agreement of CLAS Equipements.

Any waiver to enforce a provision of these T&C shall not be deemed as a waiver of such provision of or any other provision of these T&C.

In the event that provisions of these T&C will be considered as invalid by a competent jurisdiction, the other provisions will remain valid. In such case, CLAS Equipements will, at its option, replace, such canceled provision by a valid provision.

## Article 2 - GENERAL CONTRACTUAL TERMS

Proposals, offers, including its printed catalog or the same published on its website, or quotes issued by CLAS Equipements are valid only during the period defined by CLAS Equipements and are governed by the present T&C supplemented or amended by Special Conditions (see below).

The Client remains solely and fully responsible for the use of the Supplies even when information, advice or drawings have been communicated to him by CLAS Equipement. Since the Supplies are sold by the Client to an end user ("User"), such Client warrants (i) to sell them only to professionals and (ii) to provide all the information, advice and CLAS Equipements' scheme that this latter will have communicated to him and (iii) will not be released of its own obligations. The Client will ensure that all its obligations under these T&C will be, under his own responsibility, a minima, transferred and assigned to the User so that, this latter, will be able to benefit of the contractual warranty ("CLAS Warranty") detailed in these T&C. In this regard, it is specifically the Client and the User responsibilities, as professionals by nature, to check this information, advices or drawings provided by CLAS. In case of any doubt, Client/User shall contact CLAS Equipements. The absence of request sent to CLAS Equipements at following website address <https://www.clas.com/en/contact-us> at section service contact "SAV", implies a full understanding of the conditions of use of the Supplies.

The User shall attach with the request sent to <https://www.clas.com/en/contact-us> a written copy of the invoice provided by Client to justify the purchase of the Supply. In case CLAS Equipements answers to such a request despite absence of an invoice sent by the User, it shall, in no circumstances, be considered as an implicit acknowledgment of granting rights to this User.

## Article 3 - FORMATION OF THE CONTRACT

All orders shall be sent in writing by Client, including by email or in a dematerialized manner from his client account. It shall ensure the complete references of the Supplies and the related quantity are indicated or it shall refer explicitly to a quote or a proforma invoice issued by CLAS Equipements without any modification.

In any case, CLAS Equipements will make its best efforts to send a definitive acknowledgment of receipt of the order within one working day, which will be the final binding document. This acknowledgment of receipt may take the form of a letter, email or fax. In the absence of acknowledgment of receipt of the order, the initial offer issued by CLAS Equipements will be the contractual basis between the Parties, unless they expressly agree in writing to derogate.

Any purchase order with reference to its conditions of purchase or on the back of its printed order form sent or communicated by the Client to CLAS Equipements shall not be deemed as an acceptance of such purchase conditions by CLAS Equipements.

Furthermore, without any limitation, incomplete or incorrect information sent or communicated by the Client, could generate misunderstanding or errors preventing CLAS Equipements in the execution of the order and it could not be attributed to CLAS Equipements.

Some orders are subject to prior opening of a client account, for instance, for orders related to the online catalog on the website [www.clas.com](http://www.clas.com).

CLAS Equipements may decide, at its option, not to

agree to such a request to open a client account or not wish to enter into a contract with the Client for any legitimate reasons it may have, such as, the non-coverage of the contract by a sustainable credit insurance, the inadequacy of the Client's commercial practices with CLAS Equipements' policies, without any right for the Client to claim any compensation whatsoever.

The terms and conditions hereof may be subject to specific terms and conditions "Special conditions". These Special conditions will be decided by CLAS Equipements at its option by any mean, such as, in each dedicated Client account on the website [www.clas.com](http://www.clas.com). These particular terms and conditions may derogate from the present T&C on several topics :

- Discount on Catalog Prices
- Shipping costs
- Specific payment terms
- ...

Orders placed by the Client from its Client' account may therefore include Special Conditions and therefore orders for Supplies will be governed by the present T&C supplemented by the Special Conditions.

## Article 4 - SUPPLIES

CLAS Equipements' Supplies are exhaustively listed in the pre-contractual documents (catalog, proforma invoice ...) or contract (acknowledgment receipt ...).

It is the responsibility of the Client to ensure, taking into account the characteristics of the Supplies, that they correspond to its needs, in particular with respect to the technical specifications. The Client must ensure that all material and organizational conditions are met to enable the satisfactory and safe implementation and use of the Supplies, such as trained and qualified personnel to use the Supplies, a proper environment (premises, air conditioning, fluids, protections ...). Client is aware and informed that CLAS Equipements headquarter is located in France and so the Supplies comply with the laws and regulations in force in France.

When the Supplies must comply with local standards of the place of use, in particular for safety, other than a French or European technical standard to which CLAS Equipements declares to comply, the Client shall assume all the consequences resulting therefrom and CLAS Equipements shall not be held responsible in particular for incidents occurring during their use.

The Client hold and harmless CLAS Equipements for any consequences that may result from his own omissions or negligence.

## Article 5 - CHANGES

Any modification of the contract which would be requested by the Client, after its conclusion, will have to be expressly accepted by CLAS Equipements in writing with the express intent to derogate. Any request for modification of the contract shall not be taken into consideration when it comes after Supplies' shipment.

Any request for modification of the order by the Client will be the subject of a new proposal from CLAS Equipements. In case of refusal of modification by CLAS Equipements or disagreement of the Client on changes of any kind (technical or financial) related to a change request, CLAS Equipements will deliver the Supplies in the conditions and according to modalities identified in the original contract.

No termination, suspension or termination of the contract by the Client may take place without the express, prior written consent of CLAS Equipements, and under conditions that Client will indemnify this latter from any harmful consequences.

## Article 6 - PRICE - PAYMENT TERMS

Except in the case of Special conditions stated in the contract, the prices of the Supplies sold are those listed in the catalog or price list in force when order is issued and / or, where applicable, in the specific commercial proposal sent to the Client, for the duration stated on these documents. These prices are firm and definitive. They are expressed in Euro, net and without VAT.

Price are provided on ex-Works incoterm basis (EXW - ex works - Incoterm CCI 2010) at CLAS Equipements headquarter with standard packaging. In any case, they do not include the costs of loading and unloading, transportation, customs, if any, and insurances remain Client responsibility.

Any particular special request, especially for sales outside France mainland, shall be subject to a specific offer of CLAS Equipements that derogates expressly. In any case any customs fees, and insurance will remain the exclusive responsibility of the Client. CLAS Equipements reserves the right to change prices at any time by giving prior written notice of thirty (30) calendar days. Invoices are

owed on the due date stated on the invoice and / or commercial proposal.

The contracts entered between CLAS Equipements with a Client whose registered office is located in France mainland with provision of Supplies in France mainland, will be paid by bank transfer or by check within thirty (30) days end of month from the availability of Supplies or performance of the services by CLAS Equipements.

The contracts between CLAS Equipements with a Client whose headquarter are located outside France mainland with a final destination of Supplies out of France mainland, will be billed prior the availability of the Supplies and such invoice shall be fully paid before CLAS Equipements will inform the Client of disposal of said Supplies. These terms apply regardless of the incoterm chosen.

All other terms of payment shall be prior agreed in writing between CLAS Equipements and the Client.

The payment deadlines shall not be delayed, and the Client is prohibited from applying debits notes or compensation without the express prior written consent of CLAS Equipements.

CLAS Equipements reserves the right to demand the payment of the Supplies on the date of acknowledgment receipt of the order by CLAS Equipements (cash payment) (i) if the financial situation of the Client requires to do it, or (ii) if the Client has not paid all or part of the amounts due in previous order, or (iii) no sufficient guarantee of complete payment has been given by the Client.

In case of refusal by the Client of these modalities of payment without any sufficient guarantee being proposed by this latter, CLAS Equipements may, at its option, refuse any order from this Client. Indeed, the parties will have not been entering into any agreement. Thus, no Supply will be delivered, and Client will not being able to claim any compensation of any kind whatsoever.

CLAS Equipements publishes its catalog once a year and therefore the Supplies may in the meantime be subject to variations in (i) exchange rates as well as (ii) customs duties and/or transit fees, borne by CLAS Equipements. Therefore, CLAS Equipements reserves the right to pass these variations on the selling price of the Supplies. Before any order confirmation the Client will be notified of such changes.

In case of changes due to unpredictable circumstances at the date when the parties entered into the contract, if such changes make the execution excessively burdensome for CLAS Equipements that this latter had not approved at this time to assume such risk, CLAS Equipements shall have all rights to request to renegotiate the contract with the Client.

In the event of refusal or failure of the renegotiation, the parties may agree to terminate the contract at the date and under the conditions they determine, or by mutual agreement, to request a Court to adapt it. Failing to do so within a reasonable time, the Court may, at the request of a party, revise or terminate the contract at the date and according to the terms it determines.

The Parties expressly agree that the failure to pay on the due date of any payment term shall have automatic effect, without prior notice, to execute (i) the immediate payment of any other invoice, whether due or not due, even if a bank draft has been issued, and (ii) at the discretion of CLAS Equipements, either the suspension of deliveries or the prepayment of any order in progress. CLAS Equipements, reserves the possibility, in case of default of the Client and after formal notice remained unsuccessful for thirty (30) days, to cancel orders not yet executed.

Any amount not paid at the due date by a Client whose headquarter is located in France shall pay a lump sum compensation for recovery costs of forty (40) euros and late penalties equal to the rate applied by the European Central Bank (ECB) plus ten (10) percentage points.

When the headquarter of the Client is located outside France any outstanding amount not paid at due date will generate the payment by the Client of a lump sum compensation for recovery costs of one hundred (100) euros and extra late penalties as defined above.

The reference rate of the ECB is applicable on 1st of January for the first half of a calendar year and on 1st of July for the second half of a calendar year.

These penalties are automatically due and will automatically be withdrawn from the Client's account.

## Article 7 - DELIVERY - TRANSFER OF RISKS

The delivery of the Supplies shall take place in accordance with the terms and conditions set out in CLAS Equipements' proposal and in accordance with Article 6 of these T&C. Thus, once the delivery is carried out in accordance with Article 6 (Ex-Works), the Client acknowledges that the carrier is responsible for the transportation of the Supplies. Therefore, Client has no right to request for damages compensation or penalties to CLAS Equipements, in case of failure to deliver the Supplies and / or damage to the Supplies during



shipping.

If the Client does not collect the Supplies within one (1) month of the sending of a written notice of availability of the Supplies, the storage and security costs may be charged to the Client by CLAS Equipements.

If the parties have expressly agreed to derogate from the terms of Article 6 and so, that CLAS Equipements will assume the delivery of the Supplies, in such case, the delivery time is given for information only and without guarantee, whatever the incoterm chosen. Exceeding these deadlines shall not authorize Client to any deductions or indemnities against CLAS Equipements. In case of delay exceeding 4 weeks in France mainland, and 8 weeks outside France mainland, the Client may request the cancellation of the order. The installments already paid will be credited back to Client by CLAS Equipements. It is expressly agreed that deliveries outside France mainland may be made by fraction. Therefore, in such case, the acceptance by the Client of these new terms, implies that this latter shall not request the resolution of the Order since he will have accepted other terms with all the consequences that it could generate against him.

The deadlines agreed are also legally suspended by any event beyond CLAS Equipements control, especially in case of force majeure, as defined in Article 8 of these T&C and resulting in delaying delivery. Therefore, CLAS Equipements will not be responsible in case of delay or suspension of the delivery of the Supplies.

As soon as the Supplies are at the disposal of the Client, risk of loss and damages are transferred to this latter.

In any event, delivery of the Supplies can only occur when the Client has fulfilled all its obligations with respect to CLAS Equipements.

#### Article 8 - FORCE MAJEURE

In case of situation of force majeure (unforeseeable event, irresistible and external), CLAS Equipements may at its option suspend, in whole or in part, the execution of orders, until said case of force majeure will be terminated.

Is considered as a case of force majeure within the meaning of these T&C (i) any event as defined legally and / or by case law and (ii) any of the following events : the total or partial strikes limiting CLAS Equipements operations or its suppliers, subcontractors or carriers and any event of interruption of transport, supply of energy, raw materials or spare parts.

#### Article 9 - RESERVATION OF TITLE

The transfer of ownership of the Supplies by CLAS Equipements to the Client is subject to full payment of the price in principal, costs and interests.

The Client shall refrain from (i) any transformation, incorporation or assembly of the Supplies before its full payment, and (ii) selling or pledging the Supplies until the property has been transferred to this latter.

The Client shall immediately inform CLAS Equipements of the seizure, requisition or confiscation of the Supplies for the benefit of a third party, and shall inform the third party creditor of the existence of this retention of title clause for the benefit of CLAS Equipements.

In the event of non-payment of the full price in principal, costs and interest on the due date, CLAS Equipements may (i) require at any time the return of the Supplies sold, at the expense and risk of the Client and (ii) decide the resolution of contract with notice sent by any means and without further formality, without prejudice of any damages that may be claimed by CLAS Equipements. In this case, the Client authorizes CLAS Equipements and his carrier, to enter during the working hours in the premises where the Supplies are located and to remove them. The Client agrees that all the Supplies acquired from CLAS Equipements shall remain easily identifiable in its premises.

These provisions do not prevent the transfer of the risks of loss and deterioration of the Supplies in the conditions of Article 7 of these T&C.

Subject to applicable law in force, in the event of the opening of insolvency procedure for recovery or liquidation, orders in progress will be automatically resolved, and CLAS Equipements reserves the right to claim the Supplies in stock at Client premises. In case the Supplies will be sent back to CLAS Equipements, the amounts paid, total or partial, shall be retained by CLAS Equipements as compensation.

#### Article 10 - CONTRACTUAL WARRANTY

This contractual warranty ("CLAS Warranty") applies only to the Supplies sold by CLAS Equipements to the Client, who may transfer them to the User provided that the Client meets or request User to meet the following conditions.

The CLAS Warranty does shall apply to the User under the following conditions:

- User is a professional of after-market automotive sector,
- User is able to demonstrate that the Supplies for which it requests the application of the warranty have been billed by a CLAS Equipements' Client.

These conditions specific to the User are cumulative with the other conditions and terms of the CLAS

Warranty below.

Each Supply of CLAS Equipements has a pictogram that indicates the duration of the contractual warranty or not of the Supply ("NO", 2, 3, 4, 5 years, etc ...). This information is available on the website [www.clas.com](http://www.clas.com) and on the CLAS Equipements catalog.

The warranty period is limited to the time indicated by the pictogram "CLAS Warranty" from the date of delivery to the User by the Client. Are excluded from any "CLAS Warranty", Supplies categorized as consumables identified by the pictogram "NO".

10.1 - Non-conformities of the Supplies covered by the CLAS Warranty

CLAS Equipements warrants the Supplies for the non-conformities resulting from a defect within the limits of the technical and contractual specifications of the Supplies and within the limits of the provisions hereafter.

CLAS Warranty applies only to the Supplies entering into the scope of a contract between CLAS Equipements and a Client, and with the exception of Supplies provided by CLAS Equipements in the frame of such contract but not invoiced for whatever reason. Since Supplies would have been sold by User to a third party, CLAS Equipements will not provide any longer CLAS Warranty for such Supplies. CLAS Equipements will decide, at its option, of the modalities of application of said CLAS Warranty limited to the repair or replacement of the Supplies. Repair or replacement will not extend the initial time allowed by the CLAS Warranty. CLAS Warranty period starts on the date of possession by either the Client or the User, depending on who requests it.

CLAS Warranty will not apply when:

- non-conformities are the result of products or parts used by the Client / User with the Supplies
- an intervention of a third party occurred on the Supplies sold by CLAS Equipements,
- non-conformities relating to unexpected events or force majeure and for any replacements or repairs resulting from accidents, abrasion, corrosion, normal wear and tear of the Supplies, deterioration resulting from negligence, defective supervision or maintenance and defective use of the Supplies,
- use in abnormal conditions or for operations and / or with unforeseen elements, lack of qualification or experience of the personnel,
- bad storage conditions of the Supplies delivered,
- bad installation or not in accordance with the state of the art (bad connection, defective power supply) of Supplies.

#### 10.2 - Client Obligations

Application of CLAS Warranty requires Client / User will provide all evidences allowing CLAS Equipements to assess the root cause of the non-conformity subject to this warranty.

Client shall provide all written justifications to support the alleged root-cause.

The absence of evidences provided within 3 calendar months of the initial CLAS Warranty activation will terminate CLAS warranty and so the related CLAS Equipements' obligations.

CLAS Equipements could, at its option, refuse the application of the CLAS Warranty in case of non-payment by the Client of all amounts or part of any order. In such case, Client shall be fully responsible of Users' requests in this respect and CLAS Equipements will be entitled to ask compensation to Client if the User's requests cause any damage to CLAS Equipements.

Application of this CLAS Warranty implies that any Supplies sent back to CLAS Equipements must be prior agreed by this latter by an express prior written consent and, in such case, it will be done at sole Client's expenses.

Any costs supported by CLAS Equipements in respect of the CLAS Warranty that are finally not covered by CLAS Warranty shall be borne exclusively by the Client / User.

Upon receipt of the Supplies, the Client is required to check the good condition and quantity of the Supplies delivered. In this context, the Client must inform CLAS Equipements, within forty-eight (48) hours from receipt of the Supplies by the Client/User, of any detailed reservations this latter may have. After this period, no claim, of any nature whatsoever, relating to apparent non-conformity, will be accepted by CLAS Equipements. It is the Client responsibility to manage the requests of Users on this basis, a minima, according to the same conditions as CLAS Equipements, knowing that any deviation with Users will be Client' duty.

#### 10.3 Damages

CLAS Warranty is strictly limited to the obligations defined above and it is expressly agreed that CLAS Equipements will not be bound by any other compensation, damages or interest of any kind.

#### Article 11 - OTHER WARRANTIES

CLAS Equipment undertakes to warrant the Supplies, in addition to the CLAS Warranty of Article 10, only in case of mandatory applicable warranty of the law and according to the applicable law in accordance with the terms of Article 15.

#### Article 12 - RESPONSIBILITY

In no event shall CLAS Equipements be liable for indirect and / or immaterial, consequential or non-consequential damages resulting from the performance of its obligations under the contract, for example, without being exhaustive, loss of incomes, loss of profits, operating losses, any business troubles, knowing that the Client and his insurer waive any recourse against CLAS Equipements and its insurers.

In any circumstances, the overall and cumulative liability of CLAS Equipements will not exceed, the total amount paid to CLAS Equipements under the order or contract concerned by Client.

#### Article 13 - INTELLECTUAL PROPERTY

Quotations, proposals, catalogs and globally all the documents delivered or sent by CLAS Equipements to the Client, as well as the related intellectual property rights, are and remain the exclusive property of CLAS Equipements or under licensed, even though the Client has been asked to contribute to the costs.

In no event these documents may be reproduced without the prior written consent of CLAS Equipements. This provision survives the expiration of the order or contract.

It is understood that the Client will have no intellectual property rights relating to the Supplies except with the express and written agreement of CLAS Equipements.

The Client warrants that the User will hold and harmless CLAS Equipements from any claim or infringement claim that may be made against this latter by reason of a combined use of the Supplies with another product constituting as a whole an infringement of the intellectual property rights of third parties. In addition, the Client shall indemnify CLAS Equipements of all harmful consequences that could arise from this situation.

#### Article 14 - ASSIGNMENT

The contract is concluded intuitu personae according to the person of the Client and shall not be transferred without the express, prior and written acceptance of CLAS Equipements.

#### Article 15 - APPLICABLE LAW - JURISDICTION

By express agreement between the parties, these T&C are governed :

(1) between CLAS Equipements and the Client whose headquarter is in France by French law and, as a supplementary, by the Vienna Convention on the International Sale of Goods, or,

(2) between CLAS Equipements and the Client whose headquarter is outside France, by Swiss law, and, as a supplement, by the Vienna Convention on the International Sale of Goods.

These conditions are available in French. In the event that they are translated into one or more languages, and in the event of contradiction or discrepancy between the French version and the translation in any other language, the French version will prevail over the translated version.

All disputes related to these T&C about validity, interpretation, execution, termination and/or consequences will be submitted :

(1) provided that the Client has its headquarter in France, to the competent public jurisdiction of the CLAS Equipements headquarter in Chambéry (France).

(2) provided that the Client's headquarter is located outside France, shall be decided by arbitration in accordance with the Swiss Rules of International Arbitration of the Swiss Chambers' Arbitration Institution in force on the date on which the notice of arbitration is filed in accordance with this Regulation.

- a. The number of arbitrator is: one;
- b. The seat of arbitration shall be Geneva (Switzerland);
- c. The arbitration language will be in French.
- d. The defendant shall submit to the Secretariat a reply to the notice of arbitration, as well as, any counterclaim or means of compensation, within fifty (15) days from the date on which it receives the notice of arbitration. The deadline for the appointment of an arbitrator will be fifty (15) days. If the circumstances required, the Court may modify these time limits. The expedited procedure will apply, and the dispute will be decided solely on documentation.

e. Parties may also decide at any time to submit the dispute to mediation under the Swiss Rules of Commercial Mediation of the Swiss Chambers' Arbitration Institution.

# Contacts

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Please contact your usual distributor



In accordance with the provisions of the Code of the environment as regards Waste of Electrical and Electronic Equipment (WEEE) professional (Articles R.543-172 and following), CLAS EQUIPEMENT answers its obligations by adhering to ECOSYSTEM. ECOSYSTEM is an eco-organization approved by the Public Authorities, with nonlucrative goal, and pursuing a mission of general interest of collection, depollution and recycling of the Waste of the Electric and Electronic Equipment (DEEE). CLAS EQUIPEMENT brings thus to its customers the guarantee to be able to benefit from the offer of service of collection and recycling proposed by ECOSYSTEM for the professional electrical equipment which arrives at the end of life. More information on [www.ecosystem.eco](http://www.ecosystem.eco) or 0809 540 590 (free number + price of a local call)

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