



ish

OUR VALUES



OUR SINCERITY

About our relationships Transparency of exchanges Time-bound



OUR PROXIMITY

By our accessibility By listening to your needs By our accompaniment





OUR SIMPLICITY

Our global solutions About our business About our organizations OUR CREATIVITY

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

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!

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



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

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 knowhow 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





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?!

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**!















440 - INJECTORS



450 - CYLINDER HEAD



457 - PISTON & CYLINDER

460 - ENGINE STANDS



462 - FUEL





475 - ADBLUE®



476 - EXHAUST SYSTEM



482 - HYBRID & ELECTRIC PROTECTION

488 - HYBRID & ELECTRIC ELECTRONICS

481 **HYBRID & ELECTRIC**



497 - HYBRID & ELECTRIC SIGNS



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498 - HYBRID & ELECTRIC REELS & LOAD





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504 - AUTO GLASS



517 - BODYWORK HANDLING



519 - BODYWORK LIFTING



521 - WELDING & CUTTING





524 - PULLING & RESTRAINING



530 - PLASTIC REPAIRING



535 - BODYWORK PAINTING



542 - DOORS & CABIN



544 - BODYWORK STAPLES









IN BRIEF

ONE COMPANY - ONE TEAM!

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

CLAS "Garage Solutions" is a team of passionated **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

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.

HYBRID & ELECTRIC



INTERVENTION ON HYBRID AND ELECTRIC VEHICLES



How to operate on hybrid/electric vehicles?

- be educated and qualified
- be equipped
- comply with current standards

To consider:

Before operating on hybrid and electric vehicles, the technician must complete a training session to be qualified to make the interventions.

According to the French Labor Code, Article R. 4544-10, it is the responsibility of the employer to issue, maintain or renew the accreditation in accordance with the procedures specified in the standards mentioned in Article R. 4544-3, depending on the operations to be performed by the employee. Contact us for training sessions.

Major automotive qualifications:

Activity	Function	Symbol	
Consignment	Consignment officer	BCL	
Design and testing	Operations officer	BRL	
offices	Testing officer	BEL Test	
Assistance and	Operations officer	B2XL Assistance - towing	
towing services	Executive	B1XL Assistance - towing	
Dismantling	Operations officer	B2XL Dismantling	
Dismanting	Executive	B1XL Dismantling	
Technical	Operations officer	B2XL Technical inspection	
inspection	Executive	B1XL Technical inspection	
Testing and	Operations officer	B2XL Testing and certification	
certification	Executive	B1XL Testing and certification	
	Repairs officer	BOL Repairs officer	
	Repairs executive	BOL Executive	
Maintenance	Works officer (simple access*)	B2L	
	Executive (simple access*)	B1L	

Activity	Function	Symbol	
	Works officer (reinforced access**)	B2VL	
	Executive (reinforced access**)	B1VL	
	Works officer under voltage	B2TL	
Maintenance	Works executive under voltage	B1TL	
	Operations officer: batteries, super condenser, PAC	B2XL Battery operation	
	Operations executive: batteries, super condenser, PAC	B1XL Battery operation	
	Automotive expertise officer	BEL Automotive expertise	
Emergency services	Operations executive: emergency services	B2XL emergency services	
	Executive: emergency services	B1XL emergency services	

* The operator is positioned more than 30 cm from an electrical supply

** The operator is positioned less than 30 cm from an electrical supply

HYBRID & ELECTRIC PPE

NEW

NEW

ELECTRIC ARC PROTECTION JACKET



- flash arc class 1, ATPV 12 cal/cm²
- standards: EN 13034: 2005 / EN 1149-5: 2008 / EN ISO 11611: 2007 / EN ISO 11612: 2008 / IEC 61482-2: 2009 (CLASS 1 AND ATPV 12 cal/cm²)
- fabric composition: 79% cotton, 20% polyester, 1% antistatic fiber, 300 gr/m 2
- ATEX zone

OE 0530	ELECTRIC ARC PROTECTION JACKET SMALL
OE 0531	ELECTRIC ARC PROTECTION JACKET MEDIUM
OE 0532	ELECTRIC ARC PROTECTION JACKET LARGE
OE 0533	ELECTRIC ARC PROTECTION JACKET X-LARGE
OE 0534	ELECTRIC ARC PROTECTION JACKET XX-LARGE

ELECTRIC ARC PROTECTION PANTS

Specifications:

- flash arc class 1, ATPV 12 cal/cm² standards: EN 13034: 2005 / EN 1149-5: 2008 / EN ISO 11611: 2007 / EN ISO 11612: 2008 / IEC 61482-2: 2009 (CLASS 1 AND ATPV 12 CAL/CM²)
- fabric composition: 79% cotton, 20% polyester, 1% antistatic fiber, 300 $\mbox{gr/m}^2$
- ATEX zone

OE 0547	ELECTRIC ARC PROTECTION PANTS (S)
OE 0548	ELECTRIC ARC PROTECTION PANTS (M)
OE 0549	ELECTRIC ARC PROTECTION PANTS (L)
OE 0550	ELECTRIC ARC PROTECTION PANTS (XL)
OE 0551	ELECTRIC ARC PROTECTION PANTS (XXL)

SAFETY SHOES WITH INSULATING SOLE

STANDARD: EN ISO 20345:2011

OE 0538	SAFETY SHOES WITH INSULATING SOLE (38)
OE 0539	SAFETY SHOES WITH INSULATING SOLE (39)
OE 0540	SAFETY SHOES WITH INSULATING SOLE (40)
OE 0541	SAFETY SHOES WITH INSULATING SOLE (41)
OE 0542	SAFETY SHOES WITH INSULATING SOLE (42)
OE 0543	SAFETY SHOES WITH INSULATING SOLE (43)
OE 0544	SAFETY SHOES WITH INSULATING SOLE (44)
OE 0545	SAFETY SHOES WITH INSULATING SOLE (45)
OE 0546	SAFETY SHOES WITH INSULATING SOLE (46)



NEW

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ATPV 12 call EC J.

ATP/12 callon?





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HYBRID & ELECTRIC • HYBRID & ELECTRIC PROTECTION



HYBRID & ELECTRIC PROTECTION • HYBRID & ELECTRIC



| **CLAS** | 487

HYBRID & ELECTRIC • HYBRID & ELECTRIC ELECTRONICS



Ø





Contents:

- EG0080: foam storage tray
- OE0505 to 0E0514: open end insulated wrench





Contents:

• EG0080: foam storage tray

premium (15mm to 24mm)

• OE0515 to OE0524: open end insulated wrench

(Qb)

1000V



Contents:

- EG0080: foam storage tray
 OE0568: insulated ratchet 1000v 1/2"
- OE0248 to OE0264: 1/2" double hex insulated
- socket (8mm to 24mm)



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(OE 0595)

INSULATED RATCHET AND DOUBLE HEX SOCKET 3/8" INSERT

To facilitate the handling of the insulated tools by the technician equipped with his P.P.E. (gloves and over-gloves), we have placed the tools in an adapted foam insert.





\$

1000V

QD

WARRANT

Contents:

- EG0080: foam storage tray
- OE0711: insulated ratchet 1000v 3/8"
- OE0231 to OE0247: 3/8" double hex insulated socket (8mm to 24mm)
- 300ket (0mm to 24mm)





• A color difference is applied between both insulating layers to allow a visual control of the whole tool in order to confirm its good use in electrical environment as recommended by the UTE18-510 and the IEC 60900 standards.

WHEN THE ORANGE LAYER IS DAMAGED AND THE RED LAYER IS VISIBLE = DANGER.

• The thickness of the insulated layers is based on the weight of the tools in order to provide optimal resistance.

- The tools are built to resist extreme temperatures from -20 to +70 $^{\circ}\mathrm{C}$
- \bullet Each tool is certified for 10.000V AC and approved for 1000V AC for low voltage networks.
- Multiple inspections at each stage of production in addition to the IEC 60900 standard inspections.



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HYBRID & ELECTRIC • HYBRID & ELECTRIC ELECTRONICS



OPEN END INSULATED WRENCH PREMIUM

Ref	Name	Lenght
OE 0505	OPEN END INSULATED WRENCH 5mm PREMIUM	80 mm
OE 0506	OPEN END INSULATED WRENCH 6mm PREMIUM	104 mm
OE 0507	OPEN END INSULATED WRENCH 7mm PREMIUM	104 mm
OE 0508	OPEN END INSULATED WRENCH 8mm PREMIUM	107 mm
OE 0509	OPEN END INSULATED WRENCH 9mm PREMIUM	112 mm
OE 0510	OPEN END INSULATED WRENCH 10mm PREMIUM	120 mm
OE 0511	OPEN END INSULATED WRENCH 11mm PREMIUM	130 mm
OE 0512	OPEN END INSULATED WRENCH 12mm PREMIUM	130 mm
OE 0513	OPEN END INSULATED WRENCH 13mm PREMIUM	135 mm
OE 0514	OPEN END INSULATED WRENCH 14mm PREMIUM	140 mm
OE 0515	OPEN END INSULATED WRENCH 15mm PREMIUM	147 mm
OE 0516	OPEN END INSULATED WRENCH 16mm PREMIUM	150 mm
OE 0517	OPEN END INSULATED WRENCH 17mm PREMIUM	157 mm
OE 0518	OPEN END INSULATED WRENCH 18mm PREMIUM	160 mm
OE 0519	OPEN END INSULATED WRENCH 19mm PREMIUM	166 mm
OE 0520	OPEN END INSULATED WRENCH 20mm PREMIUM	172 mm
OE 0521	OPEN END INSULATED WRENCH 21mm PREMIUM	180 mm
OE 0522	OPEN END INSULATED WRENCH 22mm PREMIUM	184 mm
OE 0523	OPEN END INSULATED WRENCH 23mm PREMIUM	186 mm
OE 0524	OPEN END INSULATED WRENCH 24mm PREMIUM	204 mm







1/2" DOUBLE HEX INSULATED SOCKET

NEW

\$ 2 1000V WARRAN

NEW

Ref.	Name	Lenght
OE 0248	1/2" DOUBLE HEX INSULATED SOCKET 8mm	55 mm
OE 0249	1/2" DOUBLE HEX INSULATED SOCKET 9mm	55 mm
OE 0250	1/2" DOUBLE HEX INSULATED SOCKET 10mm	55 mm
OE 0251	1/2" DOUBLE HEX INSULATED SOCKET 11mm	55 mm
OE 0252	1/2" DOUBLE HEX INSULATED SOCKET 12mm	55 mm
OE 0253	1/2" DOUBLE HEX INSULATED SOCKET 13mm	52 mm
OE 0254	1/2" DOUBLE HEX INSULATED SOCKET 14mm	55 mm
OE 0255	1/2" DOUBLE HEX INSULATED SOCKET 15mm	53 mm
OE 0256	1/2" DOUBLE HEX INSULATED SOCKET 16mm	55 mm
OE 0257	1/2" DOUBLE HEX INSULATED SOCKET 17mm	54 mm
OE 0258	1/2" DOUBLE HEX INSULATED SOCKET 18mm	54 mm
OE 0259	1/2" DOUBLE HEX INSULATED SOCKET 19mm	55 mm
OE 0260	1/2" DOUBLE HEX INSULATED SOCKET 20mm	55 mm
OE 0261	1/2" DOUBLE HEX INSULATED SOCKET 21mm	55 mm
OE 0262	1/2" DOUBLE HEX INSULATED SOCKET 22mm	55 mm
OE 0263	1/2" DOUBLE HEX INSULATED SOCKET 23mm	55 mm
OE 0264	1/2" DOUBLE HEX INSULATED SOCKET 24mm	57 mm

(OE 0568)

INSULATED RATCHET 1000V 1/2"





49 mm

49 mm

TN

NEW

OE 0561

OE 0246

OE 0247

INSULATED TORX SCREWDRIVER T30

The screwdriver has a perfectly round handle end providing to the user an excellent grip and working comfort. This end of the handle is also rotatable which facilitates the tightening approach: the rotating ball of the handle is held in the palm and the fingers control the rotation. Thanks to the cutting of the blade, there is no extra thickness of insulation on the upper part of the blade to reach the screws housed in fine wells.

3/8" DOUBLE HEX INSULATED SOCKET 23mm

3/8" DOUBLE HEX INSULATED SOCKET 24mm







OE 0700

HYBRID AND ELECTRIC VEHICLES INSULATED TOOLS 1000V



OE 4002) MULTIMETER MEGOHMETRE AND INSULATION TESTER 1000V CAT. III

Measures higher voltages and insulation resistances for electrical equipment than classic multimeters. Ideal for hybrid and electrical vehicles





Specifications:

- DC voltage: 600mV-6V-60V-600V-1000V
- AC voltage: 600mV-6V-60V-600V-750V
- DC current: 60mA-400mA
- AC current: 60mA-400mA
- resistance: 600ohm-6kohm-60kohm-600kohm-6Mohm-

Standards: 60900

Compatible with authorizations: B1L, B1VL, B1TL,

B2L, B2VL, B2TL, BCL, BEL, BRL, B1XL, B2XL.

- 60Mohm • capacitance: 6nF-60nF-600nF-6µF-60µF-600µF-6mF-60mF
- temperature: -30 to 1300°C
- insulation resistance: 50V (5-50Mohm) 100V (0-100Mohm) -250V (0-250Mohm) - 500V (0-500Mohm) - 1000V (0-2Gohm)
- calculation of the dialectric reabsorption ratio (DRR) and the
- automatic polarization index (PI) display of min. med. and max. values
- battery: 4 AA 1.5V batteries

Compatible with : B1L, B1VL, B1TL, B2L, B2VL, B2TL, BCL, BEL, BRL, B1XL, B2XL.



(OE 3010) VOLTAGE SAFETY TESTER



Compatible with authorizations: B1L, B1VL, B1TL, B2L, B2VL, B2TL, BCL, BEL, BRL, B1XL, B2XL

The voltage safety tester allows to verify the lack of voltage on a electric circuit before an intervention.

Essential equipment for buildings or electrical vehicles (verifying absence of voltage).

Delivered with IP2X key tip.

It allows voltage on a circuit to be checked in accordance with standards: NF C18-510 and IEC 61243-3VAT/DDT.

Specifications:

- continuity test
- differential circuit breaker test 30mA
- moisture and dust proof
- voltage test: 2 at 690V AC/DC and 750V DC with noise emission for range change
- auto AC/DC
- resistance measurements until 2kO
- continuity noise test until 2kO
- frequency of use: DC 50-60Hz and 400Hz
- self-test of probes, cords, displays, 9V battery
- low impedance output: 390kO
- probes center distance: 19mm (for circuit breakers)



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| CLAS | 497



HYBRID & ELECTRIC LIFTING HYBRID & ELECTRIC REELS & LOAD



BODY REPAIR







(AC 2013)

DUAL LASER HEADLIGHT ADJUSTMENT DEVICE





Specifications:

100

- laser-type aligner (SA2037) compliant with standard EN 60825
- digital luxmeter
- alu column (collapsible) graduated from 20 to 150cm
- sliding regulating mechanism
- thermoplastic housing with tilt adjustment
- laser aligner power supply: 31.5V batteries (supplied)
 dimensions: L.712xW.580xH.1810mm
- UTAC NFR 63801 standard

Functions:

- control and measurement of the closing mechanism 0-4%
- control of the lateral adjustment ±5cm/10m
- measurement of the illumination intensity 0-150klux/1m, 0-240lux/25m
- intervention on headlights (xenon, halogen, LED...), anti-fog



DUAL LASER/CAMERA HEADLIGHT ADJUSTER

- checks and carries out automatic diagnostics of dipped, full beam and anti-fog beams regardless of the type of headlight: LED (Matrix, Intelligent...), xenon, halogen...
- allows the beam to be checked and automatically measured (using a camera) when
- lowered and in lateral mode. It also allows you to measure the illumination intensity. • centering of the housing using cross-form lasers.
- conforms to the standard UTAC NFR 63-801

(AC 3010)





- measuring range:
- Top and bottom alignment 0-6% (accuracy +/- 0,1%) Right and left alignment 0-10% (accuracy +/- 0,2%)
- light intensity: 150kcd
- 360° rotating aluminum column
- counterweight upward and downward motion
- 3-axis inclinometer compensating for irregularities in the ground electronically
- adjustable castors compensating for significant differences in ground levels
- housing height sensorICD color tactile 5.7" screen
- integrated printer: Registration number/date/test result
- 12V rechargeable battery
- automatic standby
- simple and quick software updates (using a USB key)
 connections: RS232, WiFi, Bluetooth
- communication protocol: Net1, Net2
- dimensions: L.695xl.660xH.1780mm









NO

HEADLIGHTS • HEADLIGHT ADJUSTMENT

OM 0416 VAG HEADLIGHT ADJUSTMENT TOOL Designed to tighten/loosen the adjustment knob specific to VAG front headlights. Applications: Audi: A4 8K, A5 8T, A6 4G W: Passat, Touareg

MORE

MATRIX - DLA - ILS : the added segments

The evolution of headlamps has led car manufacturers to create lighting modules with different construction characteristics.

The projections established by current regulations remain unchanged (low, high and fog lights), but a fourth projection must be checked depending on the vehicle manufacturer.



HEADLIGHT RESTORATION • HEADLIGHTS



3" MINI POLISHER KIT Ø75mm

MINI ORBITAL SANDER KIT Ø50-75mm



Connector supplied

Specifications:

- speed: 3,200rpm
- pad size: 75mm
- spindle thread: M6x100
- air consumption: 1701/min

PLASTIC PRIMARY

• length: 115mm

(CO 1002)

SPRAY 400ml

SA1429 : velcro sanding pad Ø75mm

Allows all plastic surfaces to be

primed before painting or gluing.



Connector supplied

Specifications:

- speed: 15,000rpm • pad size: 50-75mm
- length: 108mm
- spindle thread: M6x100
- air consumption: 1701/min

(CO 1004)

VARNISH SPRAY 1K 400ml

Enables varnishing and protection of finishing paints while providing a glossy finish.

Ideal on body parts (hood, door, wing, underbody, rims...etc) Transparent, UV and scratch resistant.





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81 dB 0,77 m/s²

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| **CLAŠ** | 503





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NO 400 ml RANT



(EG 8888) BODY REPAIR ROLLER CABINET



Contents:

EG0087 : 1 x 7 drawers roller cabinet OM0174 : 1 x ball pin hammer 440gr OC0811 : 1 x hammer + block set (7 pcs) OM0749BL : 1 x riveting pliers SA0115 : 1 x plastic chisel OC0033 : 1 x trim clip plier OP0099 : 1 x straight blowgun pen OM8081 : 1 x lock grip plier 190mm OM8080 : 1 x lock grip pliers 225mm OP1510 : 1 x 1/4"-3/8" d. mini ratchet wrench kit OP1203 : 1 x mini die grinder ø6mm 25,000rpm OM0643 : 1 x 5 carbide rotary rasps box EG0680 : 1 x 25pcs drill set hss cobalt 5% OP1450 : 1 x ø10mm reversible drill EG8009:1x dispenser/hand towel roll stand for drawers EG8001 : 1 x metal workshop waste for drawer OS3200 : 1 x ratchet insert 1/4'' (59pcs) OS4100 : 1 x combination wrench insert 6-24mm (17 pcs) OS3000 : 1 x 1/2" ratchet insert (23 pcs) OS5000 : 1 x plier insert (4pcs) OS1000 : 1 x screwdriver insert (8 pcs) OS1100 : 1 x 7 pcs torx screwdriver insert t10-40 OS0850 : 1 x hammering insert (10 pcs) OS2000:1 x hex t-handle wrench insert 3-10mm (7 pcs) OC1700BL : 1 x windscreen wiper remover OC0302 : 1 x scraper and utility knife set OC8078 : 1 x 5 pcs nylon trim removal set











OS 1000 OS 1100

OS 0850

OS 2000





WINDSCREEN CUTTING • AUTO GLASS

WINDSCREEN CUTTING





Contents:

- 4 cage extractors Ø26-30mm/Ø31-35mm/Ø36-40mm/Ø36-46mm, internal 45mm, hexagonal drive 12mm
- 1 extractor with internal grips 18-40mm, internal 45mm, hexagonal drive 12mm

(OC 1700BL)

WINDSCREEN WIPER REMOVER

Lets you handle all supports with very effective force.



(EG 0002) WINDSCREEN WASHER NOZZLE

CLEANING TOOL

ΤN

Specifications: • dimensions:

- Offmensions.
 950mm with protective cap
 870mm without protective cap
 tool diameter: 6mm
 cleaning needle and tracer needle: 0.5mm

- needle length: 13mm

| **CLAS** | 505





 nylon wire drawer 25m protective glasses

- square and triangular)
 - traction capacity 200kg (compared to 100kg for steel cable)
 up to 8 cuts before changing the nylon thread

WINDSCREEN CUTTING • AUTO GLASS



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AUTO GLASS • WINDSCREEN CUTTING








Blade width: 38mm Blade height: 19mm

(OC 0305)

RETRACTABLE SCRAPER



RETRACTABLE SCRAPER + 100 BLADES

Contents: OC0305 : 1 x retractable scraper

OC5497 : 1 x 100 scraper blade set



| **CLAS** | 511



WINDSCREEN HANDLING

OC 0665

MINI SUCTION CUP Ø50mm

Ideal for installing and removing small windows or rear view mirrors.

Specifications:

- suction cup Ø50mm
- max. load: 10kg
- locking of the suction cup using a lever • material: polyethylene and rubber

(OC 0550BL

PAIR OF SUCTION CUPS Ø115mm

Essential for positioning and gluing all kind of windscreens.

Specifications:

- tilting suction cups to adapt to various glass contours
- lever lock
- carrying handle
- capacity: 60kg
- suction cups Ø115mm supplied with fast-ratchet sling
- sling length: 4.7m
- sling length: 2.5cm

(OC 0600)

PAIR OF SUCTION CUPS Ø120mm

Essential for positioning and gluing all kind of windscreens.

Specifications:

- swappable suction cups to suit various glass shapes
- lever lock
- carrying handle
- capacity: 120kg
- suction cups Ø120mm
- supplied with fast-ratchet sling
- sling length: 5m

(OC 0611) PAIR OF SUCTION CUPS Ø140mm



B.LIN



WARRANTY

Max. Kg

120

NO

Max. Kg

60

ΤN



Suction cup Ø140mm

Specifications:

- tiltable suction cups to adapt to different window shapes
- locking by lever
- Handling grip
- capacity: 120kg • suction cups Ø140mm
- 512 | **CLAS** |







BODYWORK HANDLING • BODYWORK PARTS HANDLING



WINDSCREEN REPAIRING

OC 2213

WINDSHIELD REPAIR CASE

This windscreen repair system is designed to comply with the AFNOR NF R 19-601 standard as well as the chemical product standard 1907/2006. Its operating principle:

- depression in the impact
- resin injection
- control by means of the pump pressure gauge





BEFORE:



The intervention is carried out in complete safety, avoiding damage to the windscreen.

	Flash to
	watch the
回外光行	video !

Contents:

- SA2241: vacuum pressure pump (-1/+4bar)
- SA2242: injector support with suction cup diam 55mm
- SA2243: aluminum injector delivered with 2 seals
- CO2216: 25 doses repair 5ml (2 impacts) for impact without cracking
- CO2217: 25 doses repair 5ml (2 impacts) cracks, and finishes
- SA4104: UV lamp
- SA2244: mirror
- CO2218: glycerin gel bottle for suction cup (30ml) SA4105: 100 sheets mylar UV
- OC5497: 6 blades
- Delivered in its case



"_d



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.



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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

BODYWORK HANDLING



BODYWORK HANDLING



	Dimensions (mm)									
	А	В	С	D	EØ	F	G	Н		
OM 2024	300	345	540	625	100	190	68	560		



SA 2071	PAIR OF PIVOTING WHEELS Ø100x30mm	Spare part of OM 2024/OM 2018/OM 2021
SA 2072	PAIR OF PIVOTING BRAKED WHEELS Ø100x30mm	Spare part of OM 2024
SA 2074	PAIR OF ALUMINUM ROLLERS	Spare part of OM 2024/OM 2018/OM 2021

Max. 1.36



BODYWORK LIFTING



CLAS | 519



BODYWORK PLIERS

F∈

Model equipped with a swiveling head to punch (Ø5mm) and fold (12mm) sheet steels before welding. For sheet steel 1.4mm maxi.









SA 0231	CENTRAL PLASMA CUTTING UNIT
SA 0232	PLASMA CUTTER TORCH
SA 0233	BAG OF 10 ELECTRODES

SA 0235 BAG OF 2 DIFFUSERS

- SA 0236 BAG OF 3 NOZZLES
- SA 0237 NOZZLE HOLDER



WELDING & CUTTING • WELDERS



SA 0239	SLIDE STRAIGHTENING HAMMER FOR SPOT REPAIRS
SA 0240	CHARGER FOR SPOTTER PULLING RINGS
SA 0241	LEVER PULLING BY POINT + 2 M5 ROUND ELECTRODES (SA0447)
SA 0245	RINGS/TRIANGLES/STARS HOLDER ELECTRODE
SA 0247	50 PULLING TRIANGLES SET
SA 0248	50 PULLING STARS SET (5 POINTED)
SA 0249	50 PULLING RINGS SET
SA 0447	M5 ROUNDED ELECTRODE
SA 0449	PULLING TWISTED 90° RINGS SET
SA 4010	50 WELDING WIRE SET L.305mm
SA 4011	500 WELDING NUT SET 2x50mm
SA 4012	500 WELDING NUT SET 2.5x50mm
SA 4018	20 BRAKE PAD SET

- spot repairer • SA0239: inertia straightening hammer for spinning
- SA0240: charger for pulling rings
- SA0241: lever of pulling by point + 2 M5 round electrodes
- (SA0447)
- SA0245: ring/triangles/stars holder electrode
- SA0247: 50 pulling triangles
- SA0248: 50 pulling stars (5 branches)
- SA0249: 50 pulling rings

Option:

• SA0449: 50 pulling twisted rings 90°

Preserves consumables up to 10x longer than a conventional spotter



(OE 1224)

OVERLOAD CIRCUIT BREAKER 12-24V

This device protects the vehicle electronically from overload.

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)





BODY REPAIR

PULLING & RESTRAINING P.524

PLASTIC REPAIRING P.530

BODYWORK PAINTING P.535

DOORS & CABIN

//

P.542

BODYWORK STAPLES P.544





SA 0801	MALE HYDRAULIC ADAPTER	Spare part of OC 0803/OC 0804/OC 0801/OC 0802 - Accessory of DM 0204
SA 0803	HYDRAULIC FEMALE ADAPTER	Spare part of OC 0803/OC 0804/OC 0801/OC 0802 - Accessory of SA 0802/OH 0014
SA 0804	SPREADER PLIERS	Spare part of OC 0803/OC 0804/OC 0801/OC 0802
SA 0805	4T HYDRAULIC RAM	Spare part of OC 0803/OC 0801
SA 0806	4T 1/4" HYDRAULIC HAND PUMP	Spare part of OC 0803/OC 0801
SA 0807	10T HYDRAULIC RAM	Spare part of OC 0804/OC 0802 - Accessory of OH 3453
SA 0808	10T 1/4" HAND PUMP	Spare part of OC 0804/OC 0802 - Accessory of OM 9385/SA 9384/SA 9382/OM 9384/OC 0705



OC 0705

BODYWORK CYLINDER SET PUSHER/PULLER 1/4"





SA 0703	MINI 4T RAM
SA 0704	2T RAM
SA 0705	MINI 10T RAM
SA 0706	4T RAM
SA 0707	10T RAM
SA 0708	5T PULLING JACK
SA 0709	2T PULLING JACK



AIR HYDRAULIC PUMP 10T 1/4"

Accessory of DM 0204/OH 3453/OM 9385/OM 9387/ OC 0705/OC 0801/OC 0802/OC 0703/OH 0010



Specifications:

• 700bar

- aluminum reservoir
- internal load limiting deviceexhaust muffler

• dimensions: L.255xW.135xH.185mm



TN



(OC 2211) BODYWORK SLIDE HAMMER SET

Contents:

- hammer 4.5kg
- stroke 50cm
- handle with guard
- SA4221: pigs tail end
- SA4213: long curved hook 6cm
- SA4214: short curved hook 4cm
- SA4223: 90° hook U SA4216: 90° hook flat
- SA4218: straight end
- SA4219: screwed end
- SA4220: chain end





PAINTLESS DENT REMOVAL

OC 0113

AUTO DENT REPAIR KIT WITH SLIDE HAMMER

This kit is designed to repair car bodies which have been damaged by hail, or small dents with no need to repaint the part.

The process consists of sticking plastic pulling tips with the gun and the glue especially made for bodywork, and to connect the inertial weight or the pulling lever and then have the painted sheet without damaging it. Then you can remove the pulling end with any cleaning solvent (not supplied) and the nylon chisel.



X 🕾

\$

220V

30

W

Contents:

- SA0112: inertial stainless steel hammer+pulling end
- SA0113: pulling lever (DSP) to remove dents
- SA4205: glue gun 240V-200°C-30W
- SA3110: 8 glue sticks
- SA0114: 12 pulling tips of various diameters
- SA0115: nylon chisel to remove the pulling tips
- SA0116: bottle of solvent to remove the pulling tips • 1 strong PVC box



WARRANT







OM 0700

REAR PARKING SENSOR PUNCH TOOL KIT Ø17-Ø22mm

This hollow punch kit allows holes of the required diameter to be punched in the front and rear bumpers in order to install bumper sensors (reversing sensors).





Requires a Ø8.5mm pre-punch

Specifications: • tempered steel hollow punch

- max. punch diameter: 4 to 6mm depending on the diameter of the hollow punch
- compatible with pawls and ratchet hammers
- 13mm hex drive



OM 0717	REAR PARKING SENSOR PUNCH TOOL Ø17mm
OM 0718	REAR PARKING SENSOR PUNCH TOOL Ø18mm
OM 0719	REAR PARKING SENSOR PUNCH TOOL Ø19mm
OM 0720	REAR PARKING SENSOR PUNCH TOOL Ø20mm
OM 0721	REAR PARKING SENSOR PUNCH TOOL Ø21mm
OM 0722	REAR PARKING SENSOR PUNCH TOOL Ø22mm

OM 0700 OPTIONAL KITS

OM 0727	REAR PARKING SENSOR PUNCH TOOL Ø27mm
OM 0730	REAR PARKING SENSOR PUNCH TOOL Ø30mm
OM 0732	REAR PARKING SENSOR PUNCH TOOL Ø32mm BMW/VAG/OPEL







PUNCH TOOLS SETS APPLICATIONS

REF	Size (mm)	Punch- tools	Centering device	Drill 10 + 1/4" drive	ALFA	BMW	DACIA	FIAT LANCIA JEEP	PSA	RENAULT	SKODA	VW	OPEL	ΤΟΥΟΤΑ
OC9118	17	•	•	•					•					
OC9121	17,5	•	•	•						•		•		
OC9141	17,8		•			•						•		
OC9125	18	•	•	•					•		•			
OC9132	18,2	•	•	•		•						•		
OC9126	18,4	•	•	•								•		
OC9117	18,5	•	•	•					•					
OC9137	18,6	•	•	•							•	•		
OC9142	19	•	•	•	•			•						
OC9123	20	•	•	•										•
OC9119	21	•	•	•					•					
OC9122	22	•	•	•			•			•				
OC9116	24	•	•	•									•	
OC9133	26	•	•	•								•		
OC9129	26,5	•		•								•		
OC9134	26,7	•	•	•							•	•		
OC9135	27,4	•	•	•							•			
OC9136	28,1	•	•	•							•	•		
OC9130	29,3	•	•	•								•		
OC9140	32	•	•	•	•									
OC9127	32,5	•		•	•									
OC9128	38,9	•	•	•								•		

(OC 9120)

REAR PARKING SENSOR PUNCH TOOL KIT PSA/RENAULT/DACIA (14 PCS)

Applications: PSA, Renault, Dacia, VW

Contents:

• punch and centering tool set for: Ø17,5-18-18,5-22mm

• 1 x drill bit Ø10mm



OC 9138

REAR PARKING SENSOR PUNCH MASTER TOOL KIT BMW (41 PCS)

Allows the parking sensors to be mounted in the new bumper when it needs to be replaced, for example after an accident.

Includes centering pins to position the sensor holder accurately in the center of the hole so it can be properly bonded later.

Quality punching machines ensure precise working results and clean holes with burr-free edges. Thus, the original shape is guaranteed even after the repair.



- Contents:
- 1x punching device/centering pin set 2 pcs. Ø18.0mm for BMW/Skoda
- 1x punching device/set of centering pins 2 pcs. Ø18.2mm for VW/Seat
- 1x punching/centering device pi Ø17.8mm for VW/Seat
- 1x Punching device/centering pin set 2 pcs. Ø18.4mm for VW
- 1x punching device/set of centering pins 2 pcs. Ø 19mm for FCA
- 1x punching device/set of centering pins 2 pcs. Ø24.0mm for Opel/Vauxhall
- 1x punching device/set of centering pins 2 pcs. Ø26.0mm for VW/Seat
- 1x punching device/set of centering pins 2 pcs. Ø26.7mm for VW/Skoda
- 1x punching device/set of centering pins 2 pcs. Ø27.4mm for Skoda
- 1x punching device/set of centering pins 2 pcs. Ø28.1mm for Skoda
 1x punching device/set of centering pins 2 pcs. Ø72.0mm for BMW
- 1x punching device/set of centering pins 2 pcs. Ø32.0mm for BMW
 1x punching device Ø32.5mm for BMW (without centering pin because of the DDC center)
- the oblique mounting position of the PDC sensor)
 1x punching device Ø38.9mm for VW (PLA) (without centering pin due to slanted mounting position of PLA = park assist)
- 1x 3/8'' punch drive with ball bearing
- 1x tip Ø10mm

TN



D WARRANT



RETAIL SET APPLICATIONS

REF	N°	OEM Code	FIESTA	FOCUS	GALAXY	B-MAX	C-MAX	TRANSIT	KUGA	MONDEO
OC 9101	#O1	501-130	•	•	•					•
OC 9102	#02	501-135	•	•			•		•	
OC 9103	#04	501-140	•							
OC 9104	#05	501-141	•							
OC 9105	#08	501-160				•			•	
OC 9106	#09	501-171								•
OC 9107	#10	501-177					•			
OC 9108	#11	501-179		•			•			
OC 9109	#12	501-180		•			•			
OC 9110	#15	501-405		•						

OPTIONAL SET APPLICATIONS



REF	N°	OEM Code	FIESTA	FOCUS	GALAXY	B-MAX	C-MAX	TRANSIT	KUGA	MONDEO
OC 9143	#16	501-193						•		
OC 9112	#17	501-192						•		
OC 9113	#18	501-138					•			
OC 9114	#19	501-150		•						
OC 9115	#20	501-151		•						

PLASTIC REPAIRING



SA 6080	5 STAINLESS STEEL GRIDS 150x115mm
SA 6081	6 SOLDERING RODS (PP-POLYPROPYLENE)
SA 6082	6 SOLDERING RODS (PS-POLYSTYRENE)
SA 6083	6 SOLDERING RODS (PE-POLYETHYLENE)
SA 6084	6 SOLDERING RODS (ABS)

OC 1025 BI-COMPOSING GUN 50ml

Allows the application of two-component adhesives in 50ml cartridges. Delivered with piston 2:1 $\,$







Specifications:

• hose length : 1.2m

• air consumption : 750L/min

• working pressure : 8bar

Specifications:

- extraction hose 3m
- service pressure: 6 to 8bar
- air consumption: 500L/min
- to be used with sand drum SA6615

- | **CLAS** | 535

BODYWORK PAINTING • BODYWORK PAINTING PREPARATION



BODYWORK PAINTING PREPARATION · BODYWORK PAINTING



Forms an elastic, wear-resistant protective coating. Protects against stone chips and corrosion



It allows you to achieve excellent results

Its active formula breaks down problems quickly. This product is suitable for use

with no effort required.

on solvent-resistant mounts.



BODYWORK PAINTING • BODYWORK PAINTING PREPARATION



BODYWORK PAINTING PREPARATION • BODYWORK PAINTING

CO 1034

ANTI GRAVEL MS POLYMER BLACK CARTRIDGE 310ml

Spare part of OP 1338

Easy to install, giving an optimal result. Ideal for application on bare metal.

This cutting-edge product can be applied wet-on-wet to obtain an optimal anti stone-chip effect in record time.



TN

<u>310</u>

Adheres to all surfaces Anti-corrosive, may even be applied to bare metal

High density: load up to 5mm in a single movement Also permits the reproduction of seals which

were originally sprayed and crimped seals

CO 1057

ANTI GRAVEL MS POLYMER BEIGE CARTRIDGE 310ml

Spare part of OP 1338

Easy to install, giving an optimal result. Ideal for application on bare metal.

This cutting-edge product can be applied wet-on-wet to obtain an optimal anti stone-chip effect in record time.

Adheres to all surfaces

Anti-corrosive, may even be applied to bare metal High density: load up to 5mm in a single movement Also permits the reproduction of seals which were originally sprayed and crimped seals





O 1030 1027 CC UBRIFIANT SIL RAY DECAPANT VIVERSEL 500m INTURE EXPRESS 500ml SPRAY 500ml SS PAINT REMOVER CO 1026 SPRAY 500ml SUPER DEGRIPPAN SP RAPHITE 400m JPER RELEASING HITE SPRAY 400

CO 1058

ANTI GRAVEL MS POLYMER GREY CARTRIDGE 310ml

Spare part of OP 1338

Easy to install, giving an optimal result. Ideal for application on bare metal.

This cutting-edge product can be applied wet-on-wet to obtain an optimal anti stone-chip effect in record time.



Adheres to all surfacesA

nti-corrosive, may even be applied to bare metal High density: load up to 5mm in a single movement

Also permits the reproduction of seals which were originally sprayed and crimped seals





2

125 mi

excellent spread and spray

ergonomic, easy to hold

• Ø0.8mm nozzle

• 60.8mm

service pressure: 1 to 2bar

BODYWORK PAINTING DRYING . BODYWORK PAINTING





OP 3510

2 DRYING GUNS + BASES

Specifications:

- ideal for drying tops and bottoms of vehicles
- fully adjustable base max. 2.08m
- power supply via spiral hose
- fast connectors
- 2 guns can be up to 0.85m apart

(OP 3520)

4 DRYING GUNS + 2 BASES

Specifications:

- ideal for drying tops and bottoms of vehiclesfully adjustable base max. 2.08m
- power supply via spiral hose
- fast connectors
- 2 guns can be up to 0.85m apart

DOORS & CABIN



12 PIECE AIRBAG MAINTENANCE TOOL SET

Depending on the application, the removal tools are to be used in pairs.



Contents:

1/4" tamperproof Torx TB30 special Airbag L.80mm Audi, BMW, Mercedes, Opel etc. • socket 1/4" Torx T30 L.80mm

- Audi, VW, Opel, Renault etc.
- socket 1/4" hex 5mm L.80mm Audi etc.
- 1/4" tamperproof Torx socket TB25 special airbag L.80mm BMW etc.
- 1/4" tamperproof Torx socket TB25 special airbag L.80mm BMW etc.
- airbag removal kit 2 pieces VW Golf IV, New Beetle, Seat, Skoda, Fabia + Octavia 99 etc.
- airbag removal kit 2 pieces VW Polo 99, Lupo, Passat B5, Audi A4, A6, Skoda Superb etc.
- central flywheel unlocking tools
 VW Passat 97, Golf IV 98, Golf Bora 99 etc.
- unblocking lever for VW 105x96mm airbags, slot 5.5+8mm
- universal tool of the airbag

(AC 7023)

AIRBAG LINE TEST

The tool simulates the presence of the igniter by substituting it with a resistance.



ΤN

Contents: • 2x2 boxes

(CO 0426)

5-1 DISPOSABLE **PROTECTION SET** (500PCS)





1 x handbrake protection

1 x floor protection



DOORS & CABIN











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 square inch (sq.in) =1 pouce carré = 6,4516cm2 1 square foot (sq.ft) = 1 pied carré = 9,2903dm2 1 square yard (sq.yd) = 1 verge carré = 0,8361m2 4840 square yard (sq.yd) = 1 acre = 0,4047ha 1 square mile (sq.mi) = 1 mille carré = 2,590km2

1 cubic inch (cu.in) = 1 pouce cube = 16,3872cm3

1 cubic yard (cu.yd) = 1 verge cube = 0,7646m3

1 cubic foot (cu.ft) = 1 pied cube = 28317cm3

1 once (US) (fl .oz) = 0,0296l

1 once (UK) (fl .oz) = 0,0284|



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



100kPa = 1 bar = 14,503psi 1,01325bars = 1 atm = 101,325kPa

1 quart (US) (qt) = 0,94631 1 quart (UK) (qt) = 1,13651 1 gallon (US) (gal) = 3,78531 1 gallon (UK) (gal) = 4,54601 1 barrel of oil = 1 baril de petrol = 0,1590m3



1 C° = 5/9 (°F-32) Conversion Celsius to Fahrenheit : C° = 5/9 (°F-32)

C°	-25	-20	-15	-10	-5 	0	5	10	15	20	25	30	35
°F	-13	-4	5	14	23	32	41	50	59	68	77	86	95



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-Ibs

Foot-pound in Newton meter: 1Ft-Ib = 1,35 Nm Foot-pound in mètre kilo: 1Ft-Ib = 0,138 Mkg Foot-pound in Inch-pound: 1Ft-Ib = 12 In- Ibs

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

- O 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 à 1mm
- 5 Dust protected
- 6 Dust tigh

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			<i>\$</i> #	Pro ele	oduct with ctrical plug			
WARRANT	Warranty period			LV/LCV			- }	Pei	trol			
	No warranty		30 W	Power			<mark>-</mark> }	Die	esel			
WARRANT	Lifetime warranty		Ц))) dB	Decibel level			_ }	AD)blue®			
IP 43	IP rating		₩₩ ™/*	Vibrations			<u>Á</u> QUICK LIFT		iicklift device ting range)			
IP 57 PRO	Professional IP rating) 12 m	Cable/hose len	ngth			Lo	w profile			
Î	Magnetic		60 L	Capacity			-\000 5 LED	LE	D quantity			
Ø	Powered by battery	Max. Kg	Maximum load			- <u>`</u> . Сов	СС	OB LED				
Ţ	Impact wrench use recommended		<u>مت</u> ر.	Use oiler			₹ 3-48V	Ter	nsion			
来 R134a	Product for R134a air conditioning gas				Product for air conditioning gas R1234yf			Mo	otorization			
TN	Tariff Normal		TE	Tariff Equipment								
RE	RECESSES											
	Flat	۲	Double Hex fema	ale	Ribe			0	XZN			
0	Square	0	Torx		۲	Ribe female		۲	XZN female			
0	Phillips		Torx E		\odot	Ribe tamperproof			Superlock			
0	Hex	Θ	Torx temperproc	of	TS TS			\bigcirc	End ball Hex			
	Hex female	0	Torx plus		\odot	TS plus		0	Pozidrive			
0	Hex tamperproof	x tamperproof Torx p		x plus female		TS plus female						

PHILLIPS*: registered trademark of Phillips Screw Co.* TORX*: registered trademark of Camcar / Textron, Texas XZN*: registered trademark of Bauer-Schaulte 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®: registred trademark of Haldex Traction Systems AdBlue®: registred trademark of Verband der Automobilindustrie e.V. (VDA) VITON®: registred trademark of DuPont Performance Elastomers L.L.C. OETIKER®: registred 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 preactivity (hereinater the 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 Equipment . 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 Equipments' 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 that all its obligations under these Tack 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 "S.A.V", 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 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 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 Equipments shall not be deem as an acceptance of such purchase conditions by CLAS Equipements.

Furthermore, without any limitation, incomplete 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

CLAS Equipements may decide, at its option, not to

agree to such a request to open a client account or owed on the due date stated on the invoice and / 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 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 Equipments declares to comply, the Client shall assume all the consequences resulting therefrom and CLAS Equipments 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 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

commercial proposal.

The contrats 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 Equipments reserves the right to demand the payment of the Supplies on the date of acknowledgment receipt of the order by CLAS Equipments (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 quarantee of complete payment has been given by the 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 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

shippina.

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. Thererfore, 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 Equipments 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 Equipments reserves the right to claim the Supplies in stock at Client premises. In case the Supplies will be sent back to CLAS Equipments, the mounts residued are partial chall be reading of all of a claim. 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 candidinate 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 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 " N O ".

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 $% \left({\left({n_{\rm s}} \right)^2 } \right)$

- 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 Equipments 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 Equipments will be entitled to ask compensation to Client if the User's request cause any damage to CLAS Equipments. 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 pagingt CLAS Equipments prod its ingurare. 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 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 cituation. 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

between CLAS Equipements and the Client (1)whose headquarter is in France by French law and, as a supplementary, by the Vienna Convention on the International Sale of Goods, or,

between CLAS Equipements and the Client (2) 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 that they are translated into one of 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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FOR ANY INQUIRIES ABOUT OUR PRICES

Please contact your usual distributor

ecosystem

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 or 0809 540 590 (free number + price of a local call)

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The origin of the paper comes from sustainably managed forests and controlled sources.





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