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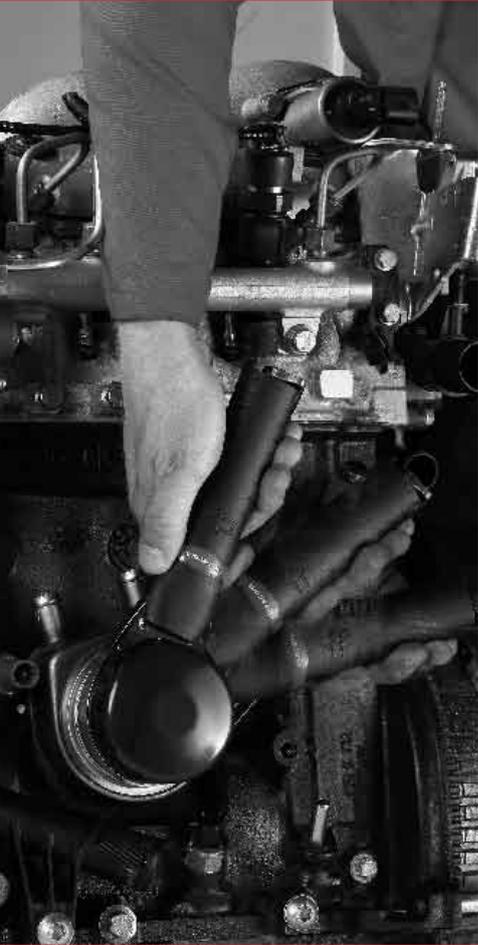
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NEW

U.48 Automatic oil-filter wrench



*Unique, automatic
and ultra-fast*

Advantages

- ▶ No adjustment
- ▶ Ratchet effect
- ▶ High torque

N  **723**

NEW

DF.17 Pneumatic brake piston tools



Essential for replacing brake pads.

Advantages

- ▶ Fast
- ▶ Easy to use
- ▶ Only 6 flanges

N  **770**

*For all maintenance
and repair operations*



Advantages

- ▶ Electronic pressure control
- ▶ Automatic stop
- ▶ 5 litre capacity

N 769



DLS.300 "Suspension" workstation

NEW

For easier, safer servicing



Advantages

- ▶ No compressor to carry
- ▶ Guaranteed safety
- ▶ All tools readily to hand

N 781



New

LIFTING EQUIPMENT RANGE



FOR FACOM, YOUR SAFETY IS PARAMOUNT

- Each product is tested by the French national testing laboratory (LNE).



- All inspections are recorded in a maintenance log.



- Permanent identification markings.



- Comprehensive safety instructions.



A range of lifting equipment meeting the latest regulations.

► Mobile lifting equipment

►► Trolley jacks

Lightweight servicing trolley jack

DL.19

- Bi-material aluminium/steel jack.
- Force 2 t.
- Rear carry handle.
- Minimum jacking clearance : 100 mm.
- Wide polyurethane cover on the bearing head.
- Quick-lift device brings jack : into contact in a single movement.
- Universal joint mechanism for accurate control.
- Automatic air release device for constant cylinder efficiency
- Silent-running polyurethane-tyred wheels
- Overload valve, CE
- Dimensions : 680 x 322 x 160 mm.

ΔΔ : 25 kg.



2T "gearbox & engine support" trolley jack

DL.20

- Extra flat 80 mm high.
- Effective length 600 mm
- Maximum lift 375 mm.
- 2T lifting capacity.
- Quick-lift device brings jack : into contact in a single movement.
- Jacking control at the end of the jack for easier and improved reach under the vehicle.
- Universal joint mechanism for accurate control.
- Automatic air release device for constant cylinder efficiency
- Silent-running polyurethane-tyred wheels
- Overload valve, CE
- Dimensions : 955 x 349 x 171 mm.

ΔΔ : 48 kg.



Plate for DL.20 jack

DL.20SUP

- This plate supports a block of high density foam that spreads the load over a large surface area and avoids damage to aluminium crankcases and under-bodies.
- For use on DL.20 and DL.32.
- This plate can also fit the DL.60 and DL.30 pit jacks.
- Dimensions : 300 x 150 x 60 mm.

ΔΔ : 4 kg.



3.2T multi-purpose car and LCV floor jack

DL.32

- Maximum lift 504 mm.
- Min. under-body clearance : 145 mm.
- Force 3.2 t.
- Quick-lift device brings jack : into contact in a single movement.
- Automatic air release device for constant cylinder efficiency
- Removable polyurethane cover on the bearing head.
- Silent-running polyurethane-tyred wheels
- Overload valve, CE
- Dimensions : 690 x 337 x 163 mm.

ΔΔ : 38 kg.



▶▶ Bottle jacks

DL.T 5 Bottle jacks - 2 to 20 tonnes

- Supplied with a handle storage support system.
- 12 and 20 T jacks come with a carry handle.
- Screw lift action.
- Treated screw.
- Overload valve
- CE.

➡	Width mm	Length mm	Min height	Max height	Capacity kg	Length of extension screw	Hydraulic displacement	ΔΔ kg
DL.2T	95	95	183	398	2000	50 mm	115 mm	2,6
DL.6T	102	115	219	427	6000	75 mm	133 mm	5,5
DL.12T	134	134	240	473	12000	80 mm	153 mm	8,9
DL.20T	150	159	242	475	20000	80 mm	153 mm	13,5



▶▶ Axle stands

Pair of 2.2T axle stands

DL.3

- Capacity 2.2 t.
 - Axle stands with locking pin.
 - 6 height settings from 295 to 492 mm
 - Pin chained to the stand.
 - Polyurethane contact surface protection
 - CE.
 - Tested in the French national testing laboratory (LNE)
 - Folded dimensions : 295 x 210 x 210 mm.
- ΔΔ : 5.5 kg the pair.



▶▶ Pit jacks

Pit jacks

DL.60 :

- "Dead man" safety lowering device
- Safety overload valve.
- Polyurethane wheels.
- Reversible basket.
- Can support DL.20SUP (Optional).
- CE.

DL.30 :

- Initial adjustment three times faster than a traditional jack.
- Quick installation device.

➡	Capacity maxi	Min height	Max height	Load area	ΔΔ kg
DL.30	300 kg	1277 mm	2105 mm	575x543	31
DL.60	600 kg	1167 mm	1997 mm	560x560	39



1T folding workshop crane

DL.10

- 5-stage extending jib.
- Pivoting hydraulic unit controller (270°)
- Rotating hook (2 axes)
- Polyurethane-tyred wheels
- Extra flat (100 mm high) frame with a wide, stable base
- Folded dimensions 450 x 600 mm
- Additional castors for easily moving the folded crane.
- Overload valve, "Dead man" device, CE, Tested by the National testing laboratory (LNE)

ΔΔ : 90 kg.



Load balancer

DL.101

- Balances the crane to suit the shape of the component or engine to be hoisted.
- Complete with 4 chains.
- Crank-operated for easy adjustment.
- Maximum load 600 kg
- Distance between chains 330 mm.



► Inspection creeper



When comfort equals efficiency

To reduce the risks of backache.

Backache is a frequent cause of absence from work. It is estimated that at least 60 to 70 % of the population will suffer backache during the course of their professional career. Working on the middle or bottom of a vehicle requires suitable, good quality equipment to avoid the risk of injury.



Seat DTS.4

- Stability ensured by 4 wheels.
- Easily manoeuvrable.
- Supports the back.



Creeper DTS.2

- Adjustable headrest for prolonged horizontal working without pain.
- Six wheels for easy manoeuvrability.

Inspection creeper

DTS.1A

- Slim design (95 mm high) for maximum accessibility.
- Thick PVC padding.
- Comfortable and good resistance to automotive fluids.
- Strong steel frame, maximum load : 175 kg
- 6 wheels Ø 60 mm.
- Dimensions : 945 x 430 x 95 mm.

ΔΔ : 7.67 kg.



Heavy-duty creeper

DTS.2

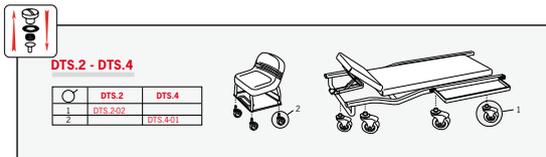
- High-strength 18 mm tubular frame.
- Thick PVC padding.
- Comfortable and good resistance to automotive fluids.
- 6 wheels Ø 60 mm.
- Maximum load : 175 kg
- Automatic rack allows instant headrest adjustment.
- Fitted with 2 metal tool shelves.
- Dimensions : 1,020 x 600 x 95 mm.
- ΔΔ : 8.6 kg.



Mid-height work seat

DTS.4

- Ideal for working on wheels, brakes and bodywork.
- Thick heavy-duty PVC padding.
- Stability ensured by 4 wheels Ø 75 mm.
- Magnetic surface for fasteners and small components.
- Overall height 0.59 m.
- Seat height 0.42 m.
- L x l : 0.463 x 0.43 m.
- ΔΔ : 10 kg.



i **Lighting**

THE CORRECT LIGHT : AN ESSENTIAL CONSIDERATION.





Refer to the lighting section for details of our complete range (p.). 556

► Protection

►► Wing cover

Non-magnetic wing cover with suction fasteners

CR.D2

- Non-scratch, quick-to-install suction fastener system.
- Each suction fastener can support 3 kg.
- Suitable for use with sheet metal, aluminium and composite materials.
- Adapts to all vehicle types.
- Cut-out provided for wheels.
- Easy maintenance.
- Impact and scratch resistant.
- High quality finish.
- Hook closers.
- ΔΔ : 480 g.



► Drain plug wrenches

Drain plug wrench

D.13A

- Chrome finish.
- >> CITROËN, RENAULT, PEUGEOT.
- 8 x 10 mm.
- Length 230 mm.
- ΔΔ : 230 g.



Engine, gearbox and differential drain plug wrench

F.63C

- >> ALFA ROMEO, FIAT, LANCIA.
- 12 mm hexagonal male.
- ΔΔ : 280 g.



Engine drain plug wrench

P.27B

- >> CITROËN, PEUGEOT.
- 10 mm male.
- ΔΔ : 270 g.



Gearbox and differential drain plug wrench

T.33A

- >> RENAULT.
- 10 mm female.
- ΔΔ : 200 g.



Gearbox drain plug wrench

T.173A

- >> RENAULT Espace.
- 10 mm male and female.
- Length 230 mm.
- ΔΔ : 300 g.



Gearbox and differential drain plug wrench

T.273

- >> RENAULT, VOLVO.
- 8 mm male and 10 mm female.
- Length 260 mm.
- ΔΔ : 340 g.



Selection of 12 drain-plug bits

D.108J12

- Supplied on a rack.
- Comprising :
 - 4 male bits \square 8-10-10.5 and 13.1 mm.
 - 1 female bit \triangleright 10 mm.
 - 1 female bit \square 10 mm.
 - 6 hexagon male bits 8-10-12-13-14 and 17 mm.
- $\Delta\Delta$: 550 g.



3/8" drain plug bit with 10 mm female square

D.106-10

- Drive \square 3/8" (Junior).
- \square 10 mm.
- $\Delta\Delta$: 40 g.



3/8" drain plug bit with male triangle

D.109-10

- Drive \square 3/8" (Junior).
- \triangleright 10 mm.
- $\Delta\Delta$: 40 g.



► Oil-filter wrenches

Fast oil-filter wrench

U.46ACL

- High-strength smooth stainless steel band wrench.
- Sprung hinged jaw grips filter and provides ratchet effect.
- Resilient glass fibre reinforced composite handle (resistant to hydrocarbons, impact, etc.).
- Multi-thread adjustment screw for fast pre-tightening.
- Dimensions : 290 x 45 x 45 mm.
- Ratchet effect and 5° increments.
- Handle length : 175 mm.
- \varnothing 66 to 106 mm filters.
- $\Delta\Delta$: 345 g.



	Description
U.46CL06	Stainless steel strap

D.105 3/8" drain plug bits with male square

- Square drive : \square 3/8" (Junior).

	\square mm	$\Delta\Delta$ g
D.105-8	8	30
D.105-10	10	35
D.105-10,5	10,5	35
D.105-13,1	13,1	60



D.107 3/8" drain plug bits with 10 mm male hexagon.

- Square drive : \square 3/8" (Junior).



	\varnothing mm	$\Delta\Delta$ g
D.107-8	8	30
D.107-10	10	35
D.107-12	12	35
D.107-13	13	40
D.107-14	14	40
D.107-17	17	50

Drain plug bit

D.120-16

- XZN pattern \varnothing 16 mm.
- Drive \square 3/8" (Junior).
- >> V.A.G. gearbox.
- $\Delta\Delta$: 40 g.



Oil change and filter module

MOD.U46CLPB

- 13 drain plug bits \square 3/8" :
 - D.105-8-10-10.5-13.1.
 - D.106-10.
 - D.107-8-10-12-13-14-17.
 - D.109-10.
 - D.120-16.
- Fast oil-filter wrench U.46ACL
- Coupler S.230 \square 1/2" \square 3/8".
- $\Delta\Delta$ 1.1 kg.



New

U.48 AUTOMATIC OIL FILTER WRENCH

UNIQUE, AUTOMATIC AND EFFICIENT



No adjustment.

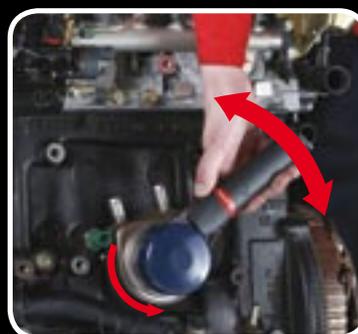
- Fits diameters 66 to 105 mm.
- Universal torquing force regardless of the size of the filter.



Set.



Position and release.



Ratchet effect ensures quick tightening and loosening.

New

Automatic oil-filter wrench

U.48

- Ratchet effect :
 - fast ratchet action.
 - allows fast working in even the most congested conditions.
- Optimised automatic tightening :
 - saves time.
 - strap torque control for optimum ratchet effect.
- Filter diameters : 66 to 105 mm.
- ΔΔ : 285 g.



Adjustable oil-filter wrenches

- For cars and heavy goods vehicles..

	L max	Ø mm	ΔΔ g
U.46	260	65...105	310
U.46PL	300	105...145	350



Chain wrench

D.149

- Suitable for filters Ø 50 to 110 mm.
- Drive \square 1/2".
- ΔΔ : 280 g.



Self-gripping oil-filter wrench

D.151A

- Suitable for filters Ø 65 to 120 mm.
- Drive \square 3/8".
- $\Delta\Delta$: 580 g.



Self-gripping HGV oil-filter wrench

D.151PL

- Drive : \square 1/2".
- Diameter : Ø 95 to 165 mm.
- $\Delta\Delta$: 1.345 kg.



Cap wrench

D.163

- For original VOLKSWAGEN, AUDI, SEAT filters, as well as interchangeable Mann® and KNECHT filters.
- \square 3/8".
- 19 mm six-point.
- $\Delta\Delta$: 110 g.



Cap wrenches with flats

- Drive \square 3/8".

	Filter mm	$\Delta\Delta$ g
D.139	14 point Ø 65.0	135
D.140	14 point Ø 74.0	160
D.141	15 point Ø 92.0	205
D.159	14 point Ø 66.5	140
D.160	15 point Ø 74.0	160
D.161	15 point Ø 79.0	175
D.162	15 point Ø 89.0	200
D.164	8 point Ø 74.0	150
D.165	10 point Ø 92.0	190



Notched cap wrenches

- For oil and diesel Purflux filters.
- Square drive : \square 3/8".

	Notches	mm	$\Delta\Delta$ g
D.154	6	66,0	200
D.155	6	76,0	225
D.156	9	86,0	268
D.157	9	96,0	295





Spark plug wrench selection guide

GUARANTEED compliance with ISO 11168



A COMPREHENSIVE RANGE

A range for each application.

3/8" socket.

- Ideal for multivalve engines.
- Short- and long-reach range to suit the engine layout.
- The 3/8" range is perfectly suited to recent vehicles.

1/2" socket.

- Suitable for most engines.
- Short- and long-reach range to suit the engine layout.
- The most widely used range.

Hinged wrenches.

- Ideal for situations where the engine layout prevents the use of a torque wrench.

3/8" magnetic sockets.

- For congested environments. Avoids the risk of cross-threading spark plugs.



Safety first

- Spark plug wrenches must allow sufficient play to enable the plug to engage in the cylinder head without risk of cross-threading. The spark plug's angle of freedom must also be limited to avoid damaging the insulation.
- Whenever possible, always engage the plug in the cylinder head by hand or with the help of the DM.20 spark plug fitter.
- All workshop spark plug sockets are fitted with a 3/8" or 1/2" square drive for tightening with a torque wrench.



18 Spark plugs

▶ Petrol spark plug wrenches

▶▶ 3/8" square drive sockets

Sockets 3/8" for 14 mm bihex spark plugs

- Slim sockets for 14 mm plugs.
- Spark plug retainer.
- For new Renault and Peugeot engines.
- 3/8" drive.

	L mm	ΔΔ g
B.J14BH1	90	90
B.J14BH2	250	245



Sockets 3/8" for 16, 18 and 21 mm spark plugs

- Sockets with spark plug retainer.

	Ø mm	L mm	ΔΔ g
B.J16A1	16	90	130
B.J16A2	16	250	350
B.J18A1	18	90	190
B.J21A1	20,8	90	200
B.J21A2	20,8	250	650



Torque tightening of spark plugs



WHY USE TORQUE TIGHTENING ?

- Cylinder heads are made of aluminium alloy.
- The cylinder heads of modern engines are subjected to increasingly high stresses.
- Reduction of thread diameters.

The J.208-50 torque wrench is ideal for tightening spark plugs. (for 3/8" sockets)..

RECOMMENDED TORQUES

Thread diameter (mm)	Flat seating (with seals)			Conical seating	
	18	14	12	18	14
Cast-iron cylinder head (Nm)	35-45	25-35	15-25	20-30	15-25
Aluminium cylinder head (Nm)	35-40	25-30	15-20	20-30	10-20

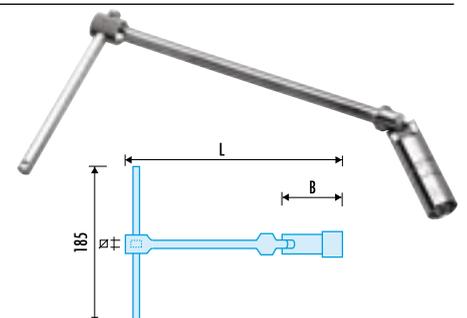
- These values are indicative only. Always refer to the manufacturers' values.

▶▶ Hinged wrenches

Hinged wrenches 3/8" for 16, 18, 19 and 21 mm spark plugs

- Spark plug retainer.
- Square drive allows use with a torque handle, e.g. D.150.

	Ø mm	L mm	B mm	ΔΔ kg
B.J16R1A	16	385	90	0,175
B.J16R2A	16	465	170	0,825
B.J18R1A	18	385	90	0,760
B.J19R1A	19	385	90	0,760
B.J21R1A	20,8	385	90	0,785
B.J21R2A	20,8	465	170	1,00



▶▶ 1/2" square drive sockets

Sockets \square 1/2" for 16, 18 and 21 mm spark plugs

- Sockets with spark plug retainer.

	Ø mm	L mm	ΔΔ g
B.S16A1	16	90	130
B.S16A2	16	250	350
B.S18A1	18	90	190
B.S21A1	20,8	90	200
B.S21A2	20,8	250	650



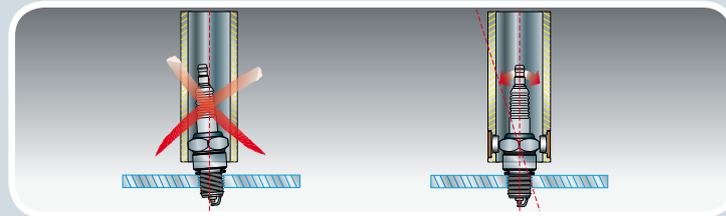
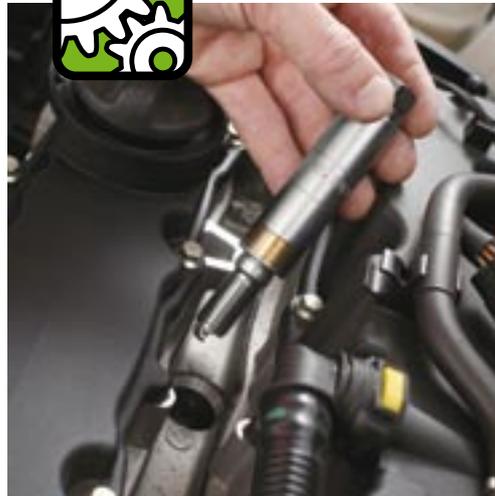
▶▶ 3/8" magnetic sockets



Magnetic spark-plug sockets

FOR AN EASIER REACH

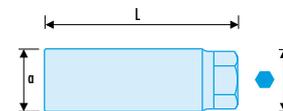
Ideal for recessed spark plugs and whenever access is difficult. Allows secure handling without damaging the insulation. Especially useful for fitting spark plugs, since the retaining magnets leave sufficient freedom for the thread to engage properly. Minimizes the risk of cross-threading.



Magnetic sockets \square 3/8" for 16, 18 and 21 mm spark plugs

- Spark plug retaining magnet.
- Polished chrome finish.
- ISO 11168.
- Square drive : \square 3/8".
- Length : 84 mm.

	Ø mm	● mm	a mm	\square "	ΔΔ g
B.J16M1	16	17	22	3/8	105
B.J18M1	18	19	25	3/8	150
B.J21M1	21	22	27,5	3/8	185



▶▶ Box wrenches for spark plugs

Box wrenches for 16 and 21 mm spark plugs

- ▷ ISO 11168, NF ISO 11168.
- Models L and M feature spark plug retainers.
- Removable tee-bar gives working angle of 90°.
- Tee-bar storage within wrench body.

	Ø mm	Ø mm	L mm	ΔΔ g
L.16AC	16	22	90	160
L.16AM	16	22	160	235
L.16AL	16	22	300	395
L.21C	20,8	26	90	180
L.21M	20,8	26	160	280
L.21L	20,8	27,5	300	460



▶▶ Spark plug lead pliers

Spark plug lead pliers

DM.28

- For disconnecting spark plugs without harming leads.
- No damage to connectors.
- Dimensions : 198 x 55 x 30 mm.
- $\Delta\Delta$: 210 g.



Spark plug lead pliers

DM.28-9

- For spark plug leads \varnothing 9 mm.
- Soft non-slip grips.
- Spring-assisted opening.
- Long handles for accessing crowded assemblies.
- Snipe nose for maximum clearance.
- Serrated ends for maximum grip.
- Length : 280 mm.
- $\Delta\Delta$: 310 g.



▶▶ Feeler gauges

Metric feeler gauges

804

- Set of 19 sizes from 4/100 to 100/100 mm.
- Blade length : 90 mm.

	Number of blades	Form of blades	Width x length of blades in mm	Blade thickness in 1/100 mm	$\Delta\Delta$ g
804	19		10 x 90	4-5-6-7-8-9-10-15-20-25-30	60



Non-magnetic metric feeler gauges

804.AM

- Blade thickness in 1/100 mm.
- 19 blades : 10 - 15 - 20 - 25 - 30 - 35 - 40 - 45 - 50 - 55 - 60 - 65 - 70 - 75 - 80 - 85 - 90 - 95 - 100.
- Brass blades 1000 mm long.
- Width : 10 mm.
- Tapered tips.
- $\Delta\Delta$: 110 g.



Long metric feeler gauges - 150 mm long

804.L

- Rounded tips.

	Number of blades	Form of blades	Width x length of blades in mm	Blade thickness in 1/100 mm	$\Delta\Delta$ g
804.L	19		10 x 150	4-5-6-7-8-9-10-15-20-25	60



Metric feeler gauges - tapered tips

804.P

- Set of 19 sizes from 4/100 to 100/100 mm.
- Description : tapered tips.
- Blade length : 90 mm.

	Number of blades	Form of blades	Width x length of blades in mm	Blade thickness in 1/100 mm	$\Delta\Delta$ g
804.P	19		10 x 90	4-5-6-7-8-9-10-15-20-25-30	60



Inch feeler gauges

804.U

- Blade thickness in 1/10,000".
- 26 blades : 15 - 20 - 25 - 30 - 40 - 50 - 60 - 70 - 80 - 90 - 100 - 110 - 120 - 130 - 140 - 150 - 160 - 170 - 180 - 190 - 200 - 210 - 220 - 230 - 240 - 250.
- Tapered tips.
- Length : 3 1/2" (88.9 mm).
- Width : 15/32".
- $\Delta\Delta$: 83 g.



▶▶ Spark plug accessories

Flexible spark plug fitter

DM.20

- Helps engage a spark plug thread in any location.
- For all types of spark plug.
- Length : 316 mm.
- $\Delta\Delta$: 50 g.



Screw holder

D.110

- For starting screws where access is difficult.
- Any head pattern.
- \varnothing 6 to 11 mm.
- Length : 305 mm.
- $\Delta\Delta$: 55 g.



▶▶ Spark plug files

Contact file

276

- Length 130 mm.
- Thickness 1 mm.
- $\Delta\Delta$: 10 g.



Diamond file

277

- Length 130 mm.
- Thickness 0.7 mm.
- $\Delta\Delta$: 10 g.



File card

270.A

- For cleaning electrodes and threads.
- Dimensions : 185 x 30 x 25 mm.



Image	Description
	270.C
	Spare card



18 Spark plugs

▶▶ Spark plug sets

GM spark plug module

MOD.BJ

- Module for 16 to 21 mm spark plugs and 8, 9, 10 and 12 mm heater plugs.
- Comprising :
 - 1 B.J14BH1
 - 1 B.J.14BH2
 - 1 B.J16A1
 - 1 B.J16A2
 - 1 B.J21A1
 - 1 DM.28-9
 - 1 B.10R8L
 - 1 B.10R9L
 - 1 B.10R10A
 - 1 B.10R12AL
 - 1 J.161
 - 1 D.110
- Tray : PL.161.



3/8" spark plug module

MOD.BJB

- Petrol spark plug servicing module.
- Comprising :
 - 1 B.J14BH1
 - 1 B.J14BH2
 - 1 B.J16A1
 - 1 B.J16A2
 - 1 B.J18A1
 - 1 B.J21A1
 - 1 DM.28-9
 - 1 DM.20
- Tray PL.669.



1/2" spark plug module

MOD.BSA

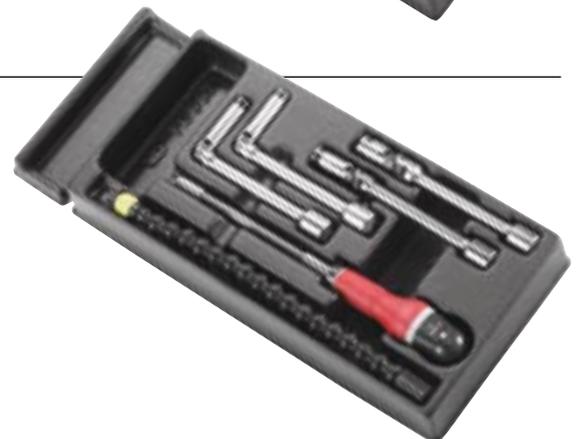
- Petrol spark plug servicing module.
- Comprising :
 - 1 B.S16A1
 - 1 B.S16A2
 - 1 B.S18A1
 - 1 B.S21A1
 - 1 DM.28-9
 - 1 DM.20
- Tray PL.668.



Glow plug module

MOD.BRA

- Diesel glow plug servicing module.
- Comprising :
 - 1 D.110
 - 1 B.10R8L
 - 1 B.10R9L
 - 1 B.10R10A
 - 1 B.10R12AL
 - 1 D.133A6
- Tray PL.667.

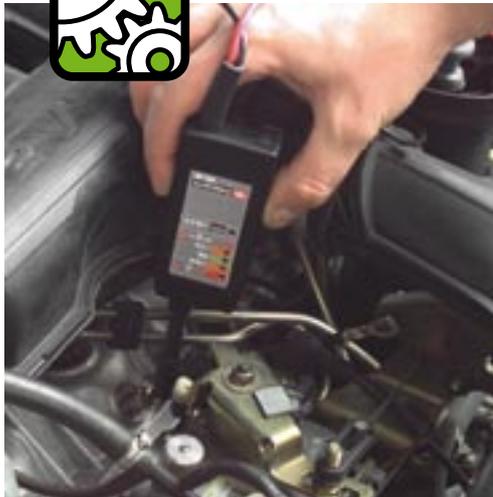


▶ Diesel glow plug testing

▶▶ Glow plug testing



Glow plug tester DX.10



SIMPLE AND COST-EFFECTIVE *Without removing.*

- For testing diesel engine glow plugs without removal.
- Compact probe for improved accessibility.
- Disconnect the glow plugs
- Connect the DX.10 to the battery.
- Touch the glow plug with the probe DX.10.
- Check the reading.

Glow plug tester

DX.10

- Test unit with probe and diagnostic diodes.
- For fast and easy testing of glow plugs on diesel vehicles (cars and light commercial vehicles) to trouble-shoot poor cold-starting.
- Indicates glow-plug condition : short-circuit, no continuity, insufficient power, etc.
- >> All makes.
- Power supply : 12 V.
- ΔΔ : 210 g.



▶▶ Diesel glow plug wrenches

Hinged wrenches 3/8" for diesel engine glow plugs

- Plug retention system.
- Universal joint with friction springs for optimum socket angle.
- Polished chrome finish.
- ISO 11168.
- 3/8".

	∅ mm	∅ mm	L mm	ΔΔ g
B.10R10A	10	14,5	161	110
B.10R12B	12	17	155	125
B.10R12AL	12	17	178	150
B.10R8L	8	12	175	120
B.10R9L	9	13	177	125



Sockets 3/8" for diesel engine glow plugs

- Spark plug retainer.
- Drive 3/8" and ∅ 17 mm (B.12-1) or 15 mm (B.10-1).

	∅ mm	∅ mm	L mm	ΔΔ g
B.10-1	10	15	70	70
B.12-1	12	17	70	80



▶ Engine testing

Digital timing light

X.730B

- Multifunction unit : tachometer (300-9,900 rpm) , timing (0.1° to 99.9°) and dwell angle readings (0.1° to 90°) , voltmeter (9 to 16V).
- Checks :
 - dwell angle, engine speed, timing, centrifugal advance (intermediate values) , vacuum advance, vacuum retard, battery voltage.
- Supplied in a plastic case with cables and connectors.
- Dimensions : 310 x 285 x 110 mm.
- Power supply : 12 V.
- ΔΔ : 1.7 kg.



Automotive multimeter 714



SIMPLIFIED ENGINE TESTING

Automatic readings

- Lambda probe test : Sweep voltage indication.
- Continuity test.
- Automatic AC/DC selection.
- Testing of EGR valve and RCO idle speed valve controls, etc.
- Injecting time testing.
- Temperature measurements (with K thermocouple probes).

Automatic clip-on ammeter

The 714 is compatible with clip-on ammeter 714P-200.

- Automatic reset : no adjustment needed.
- Measurements from 0.02 A to 200 A with the same ammeter.
- Alternative and direct current readings.

For locating leakage currents.

The diagnostic companion.

The essential electronic fault diagnostic tool.



► Testers and multimeters

Digital automotive multimeter set

714.1

Compact clip-on ammeter.

- Suitable for engine compartments and dashboards.
- Essential for locating leakage currents.
- Powered by the multimeter.
- AC currents from 0.02 A to 200 A peak
- DC currents from 0.02 A à 200 A peak, cable 2 m long.
- 714 multimeter.
- 714P.200 Clip-on ammeter 0.02 to 200 A.
- 1801.J2 Set of 2 cable probes.
- 711.19 Set of 2 test probes.
- Supplied with plastic case.



Multimeter

714

- Save time.
- Auto-ranging.
- Automatic AC/DC voltage detection, no more adjustment needed.
- Readings given directly in automotive units.
- Injection in milliseconds.
- Volts and millivolts for lambda probes.
- % opening for gate or EGR valves.
- Leakage current detection.
- Clip-on ammeter from 20 mA.
- AC voltages from 150 mV to 600 V rms.
- DC voltages from 20 mV to 600 V.
- AC currents from 0.15 to 4,000 A peak.
- DC currents 0.02 A to 4,000A peak DC using current clamp.
- Resistance to 400 k.
- Temperatures from 55°C to +1,000°C using K probe.
- Measurements of AC voltage and current are rms values.
- Power supply : 2 x LR6 1.5 V batteries (provided).
- Supplied with 2 x 600 V CAT III measuring leads with 1 red and 1 black contact probe.
- Dimensions : 63 x 170 x 40 mm.

ΔΔ : 300 g.



Compact current clamp

714.P200

- AC currents from 0.02 A to 200 A.
- DC currents from 0.02 A à 200 A.
- Compact design for use in congested spaces.
- For use with multimeter 714.
- Powered by the multimeter.
- Dimensions : 138 x 49 x 28 mm.
- Cable : 2 m long.

ΔΔ : 160 g.



Multimeter, current clamp and thermometer

712

- Automatic detection AC/DC voltmeter.
- Ohmmeter, diode and continuity testing with audible beep.
- 400 A AC/DC current clamp, automatic detection.
- Thermometer : ambient temperature.
- Supplied in a pouch, leads and battery included.

ΔΔ : 660 g.

Automatic AC/DC detection

1. Stored readings, lead resistance compensation, automatic reset, display hold, automatic selection of measuring range.
2. Min/Max key.
3. Backlit screen.



Clamp multimeter set

712-1

- Comprising :
 - 1 clamp multimeter 712.
 - 1 temperature probe (1 m long) DX.12-06 (measuring range -50°C to +285°C).
 - 1 K probe adaptor 712.01
 - Supplied in a cloth pouch.
- ΔΔ : 560 g.



Complete tester range.

See page

652



Set of cable probes

1801.J2

- Cable probes for electrical readings.



Non-contact thermometer

DX.T1

- Laser-sighted infrared non contact thermometer.

	Length mm	Width mm	Height mm	ΔΔ g
DX.T1	93	48	26	70



Indicator lamps 700 and 705

Prevents damage to computers

Vehicles are fitted with multiplex wiring. Normal bulb indicating lamps can alter the parameter settings or damage the computers. LED testers 700 and 705 can be used to check polarities or the presence of voltage. Their very low current consumption prevents any unwanted damage to the vehicle.



Continuity tester

700

- Checks earth and lead continuity when inspecting and testing electrical circuits.
- Features two indicator lights.
- Cable length : 3 m.
- ΔΔ : 105 g.



Automotive voltage tester

705

- Filter diameter : 3 to 48 V.
- LED + or - polarity indicator.
- Complete with prodding probe, cable probe for testing insulated leads, and alligator clip.
- Dimensions : 18 x 21 x 135 mm.
- ΔΔ : 55 g.



▶ Battery tools

DX.11 - Memory protection



STORED DATA SAVER

Modern vehicles carry an increasing amount of electronics. Disconnecting a battery can cause the loss of stored : car radio settings and other stored parameters. Reprogramming is a long, complicated operation that can sometimes only be performed by the manufacturer's own agents.

Time-saving and safe.

The DX.11 connects in less than a minute :

- No more need to reprogram car radios and computers.
- Current limiter ensures safety during operations with a risk of short-circuiting.

Memory protector

DX.11

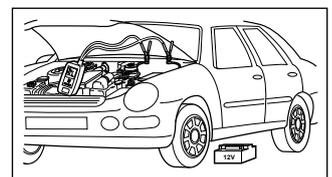
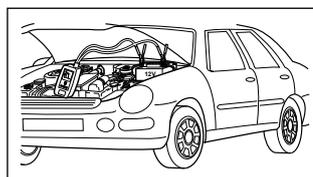
- Saves configuration and stored data of vehicle accessories when battery is changed or power is temporarily interrupted.
- Diodes for checking correct battery connection.
- >> All makes
- Power supplied : by 12 or 24V external battery.
- ΔΔ : 180 g.



12V surge limiter

DX.8-12

- Cable length : 300 mm.
- W x L x H : 100 x 20 x 45.



Lug disconnecter

U.14A

- Spring loaded, self-gripping 2-leg puller.
- For disconnecting battery terminals.

	C mini - maxi mm	T kN	Encombrement mm	P maxi mm	T Tonnes	$\Delta\Delta$ kg
U.14A	10 - 35	5	70 x 112 x 35	40	0,5	0,31



Reamer

781

- For cleaning contact surfaces on battery lugs and terminals.
- \varnothing 26 x 92 x 130 mm.
- $\Delta\Delta$: 230 g.



Battery filler

785

- Acid, oil and solvent resistant plastic.
- Length 260 mm.
- \varnothing 70 mm (120 cm³).
- $\Delta\Delta$: 85 g.



Acid hydrometer

784B

- For checking specific gravity of battery fluid.
- \varnothing 42 to 350 mm.
- $\Delta\Delta$: 100 g.



Refractometer

780A

- 2 measuring scales :
 - Coolant : 0 to -50°C (5° graduations).
 - Battery fluid density : 1,10 to 1.40 kg/l.
- Simple screw recalibration using distilled water.
- Supplied in a case with a sampling pipette and screwdriver.
- Dimensions : 70 x 235 x 700 mm.
- $\Delta\Delta$: 550 g.



► Fuses and connectors

Auto electricians kit

449.Z1A

- For routine automotive electrical servicing and repair tasks : Installation of accessories, car radios, trailer socket connections, fuse replacement etc.
- Contains :
 - The 12 most commonly used terminals for automotive applications (210 terminals)
 - 20 x 5 dia. ring terminals for 0.5 to 1.5 mm².
 - 20 x 4 dia. spade terminals for 0.5 to 1.5 mm².
 - 20 x 5 dia. ring terminals for 1.5 to 2.5 mm².
 - 15 x 6 dia. ring terminals for 1.5 to 2.5 mm².
 - 20 x 5 dia. spade terminals for 1.5 to 2.5 mm².
 - 20 x 6.3 mm dia. quick disconnects for 1.5 to 2.5 mm².
 - 15 x 6.3 mm dia. combined quick disconnects for 1.5 to 2.5 mm².
 - 20 x 6.3 mm dia. tab terminals for 1.5 to 2.5 mm².
 - 15 x 8 dia. ring terminals for 3 to 6 mm².
 - 15 cable couplers for 0.5 to 1.5 mm².
 - 15 cable couplers for 1.5 to 2.5 mm².
 - 15 cable couplers for 3 to 6 mm².
 - 1 set of 20 fuses with extractor (5A to 30 A).
 - 1 fuse holder (for 5A to 30 A fuses).
 - 5 quick splice terminals for 0.5 to 1.5 mm².
 - 5 quick splice terminals for 1.5 to 3.5 mm².
 - 1 power fuse remover DX.9 (for 40A to 80A fuses) : for easy replacement or removal of power fuses (e.g. : for removing the fuse when working on airbags)
 - 1 pair of multi-purpose pliers 449I : For cutting wire from 0.5 to 6 mm² crimping colour-coded insulated terminals, cutting threaded rods from M 2.6 to M5, crimping non-insulated terminals, stripping.
- Supplied in a case.
- Dimensions : case 350 x 300 x 60 mm.
- ΔΔ : 1.35 kg.



Maintenance crimping pliers for insulated terminals

985894

- Dual crimp on insulated terminals, to applicable standards, with grip around both conductor and insulation.
- Stainless steel die.
- Latch remains accessible.
- Good grip in the hand.
- Soft feel.
- To IEC 60352.2 / IEC 60760.
- Reverse crimping : terminal placed in the fixed part for greater efficiency and precision.

Image	Capacity mm ²	L mm	ΔΔ g
	0,4 → 6	230	490



Power fuse remover

DX.9

- For easy removal of power fuses without damage.
- Captive knob.
- Two ends : horizontal and vertical slot fuses.
- Dimensions 58 x 30 x 18 mm.
- ΔΔ : 30 g.



Crimping tools.

See page

629



► Car radio

20-piece car radio removal tool kit

DX.25

- 20 special tools for the main makes of car radio (Alpine, Blaupunkt, Becker, Grundig, JVC, Pioneer, VDO).
- Multi-make : BMW, Fiat, Ford, Mercedes, Opel, PSA, Renault, VAG,
- Supplied in a plastic pouch showing applications.



Heater plug tester DX.10

See page **731**



Engine

► Pressure testing

►► Petrol engine compression tester



911 and 912 - Compression diagnostics.

THE COMPRESSION TESTER - THE ESSENTIAL DIAGNOSTIC TOOL

Fast and safe.

Whatever the age of the vehicle, the engine cannot run at maximum efficiency if the compression is wrongly adjusted.

Compression testing is a pre-requisite for good engine diagnosis.

The Facom compression tester range is regularly updated with the latest dummy glow plugs and injectors.

A 911D or 912B compression tester is a long-term investment.

Graphic records.

Graphical printout of readings on card :

- Easy reading and interpretation.
- Traceability.



911D



912B



Petrol engine compression tester

912B

- Test cards for up to 12 cylinders.
- Integral starter-motor control.
- Self-locking hose.
- Working range 3 to 18 bar.
- Comprising :
 - 912A.SB Compression tester with hose 530 mm.
 - 912A.FC Pack of 100 test cards.
 - 911B.016 Starter-motor control lead 1.85 m.
 - 912A.014 Self-locking fitting for spark plugs M14.
 - 912A.013 Angle adaptor for easier access.
 - 912A.012 Spare rubber seal (M14 spark plugs).
 - 912A.10 Extension for deep recesses.
- BV.912B Storage case with blister tray.
- Dimensions : 430 x 340 x 85 mm.
- ΔΔ : 2 kg.



Code	Description
912A.FC	Set of 100 test cards
912A.012	Rubber seal

Set of 100 test cards

912A.FC

Rubber seal

912A.012

Adaptors for M10x100 motorcycle spark plugs

912A.019

- For use with compression tester 912B, 20 x 40 mm hexagon.

Code	Sparking plug	ΔΔ g
912A.019	M10X100	90



Adaptors for M10x125 motorcycle spark plugs

912A.020

- For use with compression tester 912B, 20 x 40 mm hexagon.

Code	Sparking plug	ΔΔ g
912A.020	M12X125	90



►► Diesel compression testers

Compression tester

911D

- Test cards for up to 12 cylinders.
- Starter-motor control integral with handle.
- Suitable for all types of diesel engine, using dummy injectors and dummy heater plugs.
- Working range 5 to 60 bar.
- Comprising :
 - 911B.00 Compression tester with hose 360 mm.
 - 911B.FC Pack of 100 test cards
 - 911B.016 Starter-motor control lead 1.85 m
 - 911B.017 Angle adaptor
 - BV.911B Storage case with blister tray.
- Complete with dummy injectors :
 - 911B.020A, 911B.021, 911B.022, 911B.023, 911B.024, 911B.025, 911B.026, 911B.027.
- And dummy glow plugs.
 - 911B.040, 911B.042, 911B.043, 911B.046.
- Dimensions : 430 x 340 x 85 mm.
- $\Delta\Delta$: 5 kg.



	Description
911B.AMM	Motometer® adaptor®
911B.049	High-pressure dummy heater plug
911B.048	High-pressure dummy heater plug
911B.047	Dummy heater plug
911B.045	Universal adaptor
911B.044	Universal adaptor
911B.041	Dummy heater plug
911B.036	High-pressure dummy injector
911B.035	High-pressure dummy injector
911B.034	Dummy injector
911B.032	Dummy injector
911B.031	Dummy injector
911B.030	Dummy injector

	Description
911B.029	Dummy injector
911B.028	Dummy injector
911B.FC	Bag of test cards
911B.031-02	Teflon seal

Motometer® adaptor®

911B.AMM

- Allows Motometer® dummy injectors to be used with a Facom 911D compression tester.
- $\Delta\Delta$: 35 g.



High-pressure dummy glow plugs (Mercedes C220/A170 CDI)

911B.049

- For use with compression tester 911D.

	Model	$\Delta\Delta$ g
911B.049	MERCEDES C22; CDI	155



High-pressure dummy glow plug (Peugeot HDI)

911B.048

- For use with compression tester 911D.

	Model	$\Delta\Delta$ g
911B.048	PEUGEOT HDI	65



Dummy glow plug

911B.047

- For use with compression tester 911D.
- >> PEUGEOT 106 with TUD 5 type engine.
- ΔΔ : 60 g.



Universal adaptor

911B.045

- Allows injectors to be used as dummies.
- Fitting Ø 14 mm.

Universal adaptor

911B.044

- Allows injectors to be used as dummies.
- Fitting Ø 12 mm.

Dummy glow plug

911B.041

- Dimensions : 430 x 340 x 85 mm.
- ΔΔ 5 kg.

High-pressure dummy injector (Mercedes C220/A170 CDI)

911B.036

- For use with compression tester 911D.

🚗	Modèle	ΔΔ g
911B.036	CDI Mercedes C220/A170	235



High-pressure dummy injector (JTD Fiat; Alfa; Lancia 1.9/2.4)

911B.035

- For use with compression tester 911D.

🚗	Modèle	ΔΔ g
911B.035	TD Fiat; Alfa; Lancia 1,9/2,4	230



Dummy injector

911B.034

- For use with diesel compression tester 911D.
- 911B.034.
- >> ALFA ROMEO 164; >> CHRYSLER Voyager SE D 93; >> FORD Scorpio 2.5TD.
- ΔΔ : 310 g.



Dummy injector

911B.032

- For use with diesel compression tester 911D.
- 911B.032.
- >> AUDI 80 1.9TDI; >> SEAT Inca 1.9D; >> VOLKSWAGEN Golf 1.9TDI - Sharan 1.9TDI.
- ΔΔ : 180 g.



Dummy injector

911B.031

For use with diesel compression tester 911D.

■ 911B.031.

>> FORD Transit 2.5D.

ΔΔ : 69 g.



Dummy injector

911B.030

For use with diesel compression tester 911D.

■ 911B.030.

>> MERCEDES 2.5C and E.

ΔΔ : 285 g.



Dummy injector

911B.029

For use with diesel compression tester 911D.

■ 911B.029.

>> MITSUBISHI Galant GLX D - Pajero GLX tbo - Space Wagon 2.0 GLX;

>> TOYOTA Carina 2.0D - Corolla 2.0D.

ΔΔ : 92 g.



Dummy injector

911B.028

For use with diesel compression tester 911D.

■ 911B.028.

>> ROVER 220 SDI - 420 SDI - 620 SDI.

ΔΔ : 160 g.



Bag of test cards

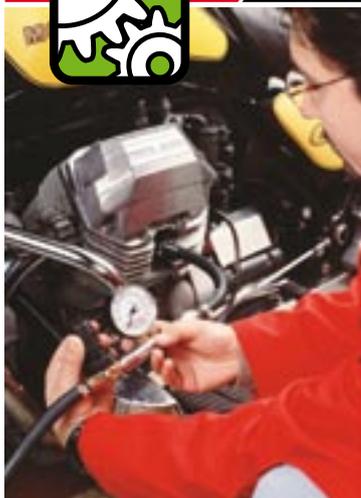
911B.FC

Rubber seal

911B.031-02



910A - Leak tester.



DIAGNOSTICS WITHOUT DISMANTLING.

Defective mechanical components are the second most common cause of engine breakdown and malfunction.

Mechanical breakdowns are more common than those caused by electronic faults.

Fault location.

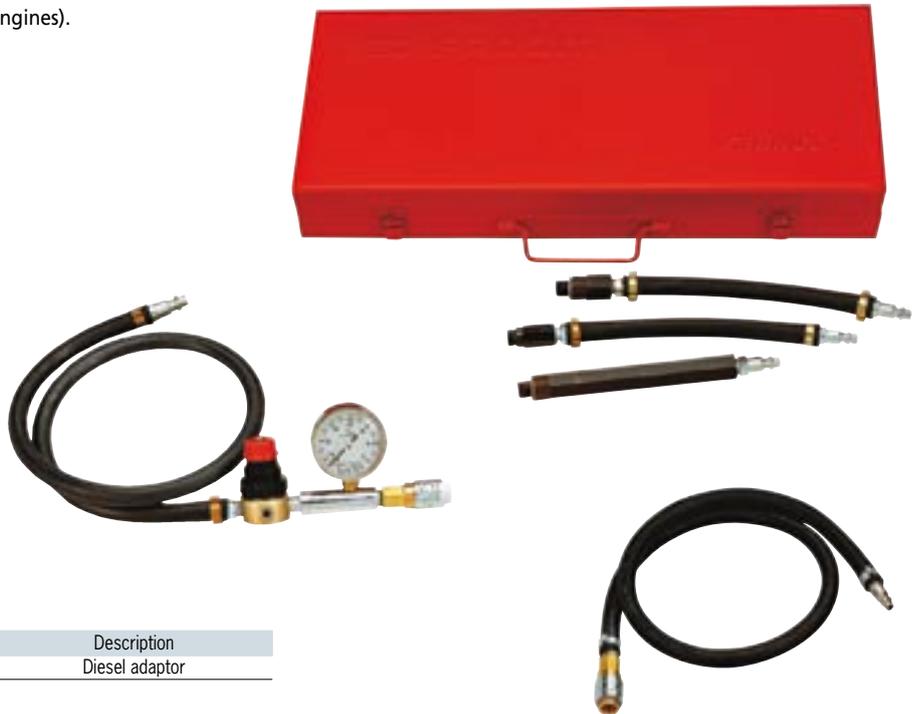
- Connect the 910A in the place of the spark plug and pressurise the cylinder. The pressure gauge will indicate the scale of the leak. The leak must then be located to determine the cause of the fault.
 - Air escaping from dip-stick recess = piston ring problem.
 - Air escaping from the exhaust = valve problem.
 - Air escaping from the inlet = valve problem.
 - Air escaping from the expansion tank = cylinder-head gasket problem.



Engine leak testing

910A

- Pinpoints compression loss (petrol engines).
- Air supply : 6 - 7 bars.
- Dimensions : 482 x 240 x 53 mm.
- ΔΔ : 4 kg.



	Description
910.06	Diesel adaptor

▶▶ Fuel pressure

DM.35

Fuel pressure and flow tester.

ANALYSES THE CAUSES OF BREAKDOWNS AND MALFUNCTIONS.

FUEL SUPPLY DIAGNOSTIC EQUIPMENT

- Modern petrol and diesel engines do not tolerate fuel supply problems.
- A faulty fuel supply causes contamination that can lead to the destruction of catalytic converters and serious malfunction.

Checking fuel pressure and flow.

- Checking the pressure is not enough, the flow must also be tested : a blocked fuel filter will give a correct pressure reading at idling speed, but the low fuel supply rate will cause serious malfunction under load.

Petrol and diesel.

- Ideal for all single or multi-point petrol injection systems, and all low-pressure fuel supply circuits of modern diesel engines.



Fuel pressure tester

DM.35-200PF

- Tests multi-point fuel injectors.
 - Range : 0 to 10 bars.
 - Measures :
 - petrol pump pressure.
 - system pressure.
 - residual pressure.
 - For checking pressure regulator.
 - Supplied complete with :
 - 26 adaptors and couplers to accommodate most models.
 - 1 set of couplers DM.35MJ1.
 - 1 set of PSA/FIAT/OPEL adaptors DM.35-39.
 - 1 connecting tee with quarter-turn valve.
 - 5 hoses, 2 couplers, 1 packet of seals.
 - For checking : fuel pump, fuel supply system, pressure regulator, non-return valve and injectors.
 - Dimensions : 360 x 340 x 125 mm.
 - Partitioned plastic case..
- ΔΔ : 3.7 kg.



Code	Description
DM.35A10	Single-point injection kit
DM.35MJ1	Set of adaptors for DM.35
DM.35-39	Set of PSA/FIAT/OPEL adaptors
DM.35-38	Peugeot and Ford adaptors
DM.35-37-01	Renault adaptor
DM.35-37-02	Renault adaptor

Single-point injection kit

DM.35A10

- Range 0 to 2 bars.
 - Higher resolution increases accuracy when testing single-point injection systems.
 - Supplied complete with adaptor
 - Storage compartment provided in case DM.35.
- ΔΔ : 400 g.



Set of adaptors for DM.35

DM.35MJ1

- Comprising :
 - DM.35-37-01 and DM.35-37-02
- >> RENAULT Megane, Clio, Kangoo, Twingo.
- DM.35-38
- >> All types, PEUGEOT 206, 1.1 litre and 1.4 litre, FORD Ka.
- Supplied in plastic box BP.100.
- Dimensions : 200 x 110 x 40 mm.



Set of PSA/FIAT adaptors

DM.35-39

- Set of 2 male and female adaptors.
 - Specifications :
 - Citroen : Saxo (NFZ and HFX engines) - Xsara (NFU and KFX engines) - Picasso (FZB engine) - Berlingo (LFX engine).
 - Peugeot : 106 - 206 - 306 - 406 - same engines.
 - Fiat group : Alfa 156/166 - Punto - Brava - Bravo - Marea.
 - Can also be used on certain OPEL engines.
- ΔΔ : 90 g.



▶▶ Inlet and turbo pressure

Vacuum/pressure pump

DA.16

- Vacuum/pressure selector valve.
- For leak testing :
 - Vacuum advance in conjunction with stroboscope X.715 or X.730A.
 - Fuel supply systems
 - Brake power assistance and any other vacuum controlled system
 - turbo wastegate control valves.
- 800 mm hose, 6 fittings.
- Vacuum : 0 to -1 bar.
- Pressure : 0 to 1.5 bar.
- Dimensions : 260 x 170 x 60 mm.
- ΔΔ : 300 g.



▶▶ Oil pressure

Oil pressure tester

914

- Quick coupler.
- Range : 0 to 8 bar.
- Supplied in a case complete with adaptors, seals and fittings.
- Dimensions : 360 x 340 x 125 mm.
- ΔΔ : 2.13 kg.



▶ Clips - hoses - gaskets

▶▶ Fuel circuit tools

New

Gauge collar remover

DM.J

- For removing and refitting gauge collar rings.

Ø	Height	ΔΔ	
mm	mm	g	
DM.J	140	85	950



New

Automatic clip pliers

DM.CC

- For opening and closing automatic clips.
- Multi-directional grip for working in a vertical or horizontal position (left or right).

Length	Width	ΔΔ	
mm	mm	g	
DM.CC	180	50	160



Fuel-line pliers

- Fuel-line fitting separator.
- DM.15-8.
- >> RENAULT, Twingo/Laguna/Scenic.
- DM.15-10.
- >> RENAULT, Laguna Diesel/all Espace models/Megane.
- Dimensions : 115 x 65 x 20 mm.

	∅ mm	L mm	ΔΔ g
DM.15-8	8	110	70
DM.15-10	10	115	67



▶▶ Hose remover

DM.44 Hose remover.

SPEEDY HOSE REMOVAL

Faster and safer.

Finally, a tool specifically designed for removing hoses. Quickly loosens and removes hoses with a simple backward and forward motion.

Protects hoses.

Hoses can now be removed without needing screwdrivers and multi-grip pliers. No more torn hoses, no more damage to plastic couplings.



Hose remover

DM.44

- Comprising a body and an adjustable jaw fitting hoses ∅ 24 to 53 mm.
- Compact tool, can be operated one-handed.
- Pins on the body grip the hose, allowing it to be loosened and removed.
- Multi-thread adjustment screw for fast pre-tightening.
- Handle size : ∅ 29 mm.
- Height : Height 167 mm (jaw fully open), 142 mm (jaw closed).
- Width : 65 mm (fully open).
- ΔΔ : 345 g.



Large diameter hose remover

DM.44PL

- Tool consisting of a body and a moving jaw that adjusts to fit hose diameters between 48 and 115 mm.
- Compact and manoeuvrable.
- Pins on the body grip the hose, allowing it to be loosened and removed.
- Multi-thread screw allows fast pre-tightening.
- Handle size : 36 mm. Grip : 90 mm.
- Height : max opening 255 mm
- Removable handle.
- ΔΔ : 769 g.



▶▶ Tools for self-tightening spring clips



DM.MUB - Spring clamp pliers.

FOR AN EASIER REACH



Time-saving.

- No need to remove components obstructing the hose clamp.
- Compact head for confined spaces.

Comfortable.

- Non-slip grips.
- Ratchet lock system for reduced effort.

Capacity 18 to 54 mm.



Spring clamp fitting and removal tool

DM.MUB

- Fits self-tightening spring clamps between 18 and 54 mm diameter.
- Can be operated with one hand
- Non-slip bi-material handle for a better grip.
- Ratchet system for reduced effort.
- Total length : 780 mm.
- Length of sleeve : 560 mm.
- ΔΔ : 500 g.

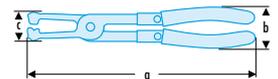
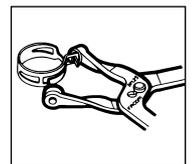


Icon	Description
	Sleeve repair kit, cable + jaws (7373280)

Self-tightening clamp pliers

- For hose clamps on cooling, heating, fuel or screen-washer systems.
- DM.25 : Slip-joint model
- DM.27 : Long-reach model with lock and pivoting jaws.
- DM.29 : Standard-reach model with lock and pivoting jaws.

Icon	a x b x c mm	Ø mm	ΔΔ g
	275 x 55 x 20	12..60	400
	275 x 60 x 25	15..56	395
	215 x 60 x 25	15..56	340

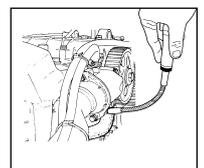


▶▶ Hose clamp drivers

Flexible screwdriver (6-point socket)

- For loosening and tightening hose clamps.
- Length : 275 mm.
- ΔΔ : 165 g.

Icon	Ø mm
	4
	5
	6
	7
	8
	10



► Cooling circuit

►► Coolant testing



921 - Cooling system tester.

EASY LEAK DETECTION

Requires only one person.

- Self-contained appliance : powered from the vehicle's battery.
- Connects to the expansion tank using the appropriate plug
- The 921 pressurises the circuit, you simply have to find the leak.

Complete range of plugs.

- Supplied with a set of 12 plugs covering the majority of the European vehicle fleet.

The power cable and hose are sufficiently long to be able to raise the vehicle on a vehicle lift with the appliance on the ground.



New

Cooling system tester

921

- Pressurised leak testing of the cooling system (hoses, clamps, pump and radiator).
- Automatically regulated electric compressor.
- 1.2 bar pressure limiter.
- 0 to 2.5 bar pressure gauge.
- Portable, stand-alone appliance (12 V).
- 4 m long spiral hose
- Power cord : 4 m long.
- Supplied with a set of 12 plugs.
- 920A compatible plugs.
- Wheeled appliance.
- CE.

ΔΔ : 15.84 kg.





935 - Cooling system filler.

ESSENTIAL FOR THE LATEST ENGINES



Safe.

- Some manufacturers are doing away with cooling system bleed screws and imposing vacuum filling systems instead.
- The 935 depressurises the cooling system, ensuring perfect bleeding.

Cost effective.

- Fills and bleeds the air from cooling systems quickly and without wasting new coolant.



Cooling system speed filler

935

- Vacuum cooling system filling tool.
- ΔΔ : 1.96 kg.



Anti-freeze hydrometer

778A

- Measures antifreeze levels in engine coolant.
- Two scales for cold or warm engines.
- Dimensions : 42 x 350 mm.
- ΔΔ : 90 g.



Refractometer

780A

- 2 measuring scales :
 - Coolant : 0 to -50°C (5° graduations).
 - Battery fluid density : 1,10 to 1.40 kg/l.
- Simple screw recalibration using distilled water.
- Supplied in a case with a sampling pipette and screwdriver.
- Dimensions : 70 x 235 x 700 mm.
- ΔΔ : 550 g.

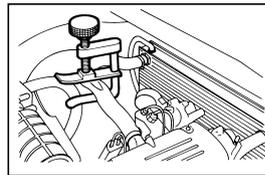


▶▶ Hose clamps

Screw-type hose clamps

- Cooling systems
- Fuel lines
- Air hoses.

	Ø mm	L mm	ΔΔ g
DM.90	27	65	190
DM.91	45	85	240



Hose clamps

- Hoses are clamped shut instantly without damage.

	Ø mm	L mm	ΔΔ g
DM.33	8...15	160	170
DM.34	15...28	180	190
DM.34GM	25...55	205	210



▶ Injectors

Sockets for diesel engine piloted injectors ☑ 1/2"

- Long-reach 12-point open sockets ☑ 1/2".

■ D.27A

>> All makes.

■ D.132B

>> CITROËN Saxo 1.5/Boxer TD.

>> FORD Maverick.

>> MAZDA Familia 1.7.

>> MERCEDES 250C > 94 >.

>> MITSUBISHI Pajero 2.

>> NISSAN Serena 2.3.

>> PEUGEOT 106/605/2.5.

>> SEAT Terra 1.7.

>> VOLKSWAGEN Polo D.

	Ø mm	Ø mm	L mm	ΔΔ g
D.27A	27	36	87	265
D.132B	22	29	98	160



Socket for injector castle nuts ☑ 1/2"

D.142

- For Bosch-type injectors on FIAT Croma 2.5 TD, can also

be used on light vehicle, van and HGV diesel engines.

Ø 28.5 x 135 mm.

ΔΔ : 320 g.



Diesel injection line wrench ☑ 3/8"

DM.19A

- 17 mm 12-point.
- Square drive : ☑3/8".
- >> RENAULT Laguna and certain diesel engines.
- Ø 27 x 95 mm.
- ΔΔ : 75 g.



Diesel injection line wrench ☑ 3/8"

DM.38

- >> MERCEDES light vehicles, vans and certain diesel engines.
- 14 mm 12-point.
- ☑ 3/8".
- Length 95 mm.
- ΔΔ : 70 g.



Injector test pump

916.600

- For checking injector leak-back, injection pressure and fuel spray pattern.
- Dial gauge 0-600 bar.
- Reservoir complete with filter.
- For use with fluid ref. 916.LE (to NF ISO 4113) and vapour extractor ref. D.144.
- Dimensions : 220 x 100 x 410 mm.
- ΔΔ : 4.4 kg.



Code	Description
916.22	ADAPTOR
916.24	ADAPTOR
916.LE	Test fluid

Test fluid

916.LE

- For checking injectors using pump 916.
- To ISO 4113.
- Supplied in a 2 litre can.



Vapour extractor

D.144

- Collects fumes and fluid when checking or adjusting injectors.
- Air inlet hose fitted with shut-off valve.
- Inlet pressure : 6 bar.
- Dimensions : 400 x 380 x 420 mm.
- ΔΔ : 5.2 kg.



► Cylinder head - valves

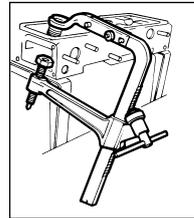
Valve lifter

U.13L

- For removing valve springs.
- Complete with jaws U.13B.
- Dimensions : 265 x 365 x 20 mm.

ΔΔ : 1.14 kg.

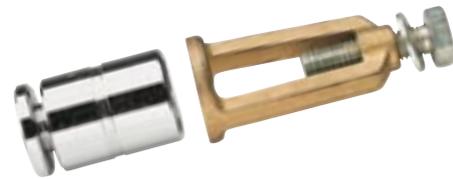
	Description
U.13A	Straight bottom-edge jaws
U.13C	Straight top-edge jaws



Collet clamp and cup

- To fit U.13L, the collet replacing the screw, with the cup inserted between the 2 jaws..
- U.13DB for 16-valve engines.

	Ø	ΔΔ
	mm	g
U.13DB	30	335
U.13DC	33	340



Slide-hammer valve lifter

U.43LA

- For removing valve springs.
- The slide hammer is used to free split collets.
- Dimensions : 200 x 390 x 36 mm.

Ø 34 mm.

ΔΔ : 1.385 kg.



Collet clamp

U.43LA16A

- For 16-valve engines.
- Fits U.43LA.
- Length 54 mm.

Ø 29 mm.

ΔΔ : 55 g.



Cylinder-head rest

U.43

- Adjustable distance between feet.
- Designed for easy use of valve lifters U.13L and U.43LA.
- Dimensions : 215 x 500 x 165 mm.

ΔΔ : 1.8 kg.



Special pliers

DM.7

- For removing valve guide seals.
- Nickel finish, burnished jaws.
- Length 245 mm.

ΔΔ : 350 g.



Valve stem seal pliers

DM.10A

- For removing valve guide seals.
- Dimensions : 235 x 80 x 15 mm.
- ΔΔ : 135 g.



Valve stem seal puller

DM.41

- Slide-hammer puller.
- Removes seals without scoring or damaging bore in cylinder-head.
- Min. hole : Ø 21 mm. Height : 70 mm.
- Slide-hammer weight : 1.2 kg.
- Length : 310 mm.
- Ø 60 mm.
- ΔΔ : 1.84 kg.

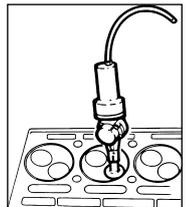


Icon	Description
DM.41-10	Expansion pullers

Air-operated valve grinder

U.54A

- Working pressure : 8 bar.
- Air consumption : 0.08 m³/min.
- Supplied with 2 suction pads : Ø 22 and 33 mm.
- Dimensions : 280 x 90 x 70 mm.
- ΔΔ : 800 g.



Icon	Description
U.54AV1	Suction pad Ø 22 mm
U.54AV2	Suction pad Ø 33 mm
U.54AV3	Suction pad Ø 30 mm
U.54AV4	Suction pad Ø 45 mm

Valve grinder

D.51

- Suction pads Ø 19 mm and 22 mm.
- Dimensions : 235 x 22 mm.
- ΔΔ : 30 g.



Scraper

D.1

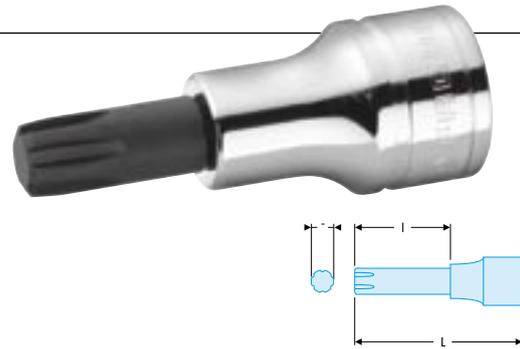
- For deburring and scraping off gasket debris.
- Triple-edge blade, width : 25 mm.
- Dimensions : 200 x 25 x 20 mm.
- ΔΔ : 105 g.



D.34B Long-reach 6-spline bit

- For removing cylinder head screws.
- Square drive : \square : 1/2".

	Ø mm	l mm	L mm	ΔΔ g
D.34B7	7	15	60	70
D.34B7L	7	63	100	120
D.34B9L	9	63	100	130
D.34B10	10	15	60	75
D.34B12L	12	63	100	140
D.34B14L	14	63	100	150
D.34B16L	16	63	100	160



12-piece set of 1/2" square drive sockets with long-reach monobloc TORX®, XZN and hex. bits

MOD.SHP

- Ideal for light vehicle cylinder heads.
- Tray PL.336.
- Dimensions : 420 x 180 x 55 mm.

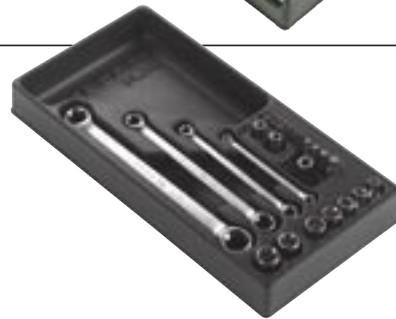
	⊕	○	○	ΔΔ kg
MOD.SHP	40 - 45 - 55 - 70	5 - 6 - 7 - 8	6 - 8 - 10 - 12	1,740



Set of TORX® sockets

MOD.TX1

- Set of Torx® wrenches.
- ΔΔ : 995 g.



7-piece set of 6-spline bits \square 1/2"

D.34J7PF

- Supplied on a rack.
- Comprising : D.34B7, 34B7L, 34B9L, 34B10, 34B12L, 34B14L, 34B16L.
- ΔΔ : 900 g.



5-piece set of drive bits for spline socket head (XZN) \square 1/2"

SV.J5PF

- Supplied on a rack.
- Diameters 6, 8, 10, 12, 14.
- Bits 63 mm - total 100 mm.
- ΔΔ : 670 g.



20-piece set of short-reach bits

SE.1APB

- Comprising :
 - 1 bit holder \square 1/2", \varnothing 5/16".
 - 5  hexagonal bits 4 to 10 mm.
 - 8  Torx® bits no. 20 to 55.
 - 4 XZN bits 6 to 12 mm.
 - 3  Pozidriv® bits no. 2 to 4.
- ΔΔ : 475 g.



Angular torque gauge



Angular torque gauge

SPECIALLY DESIGNED FOR CYLINDER-HEADS

Compliance with manufacturers' recommendations.

- It is essential to apply the manufacturers' recommended cylinder head torques.
 - Tightening to the correct torque with a suitable torque wrench.
 - Apply the correct torquing sequence.
 - Apply the correct turn angle.
- Facom offers a complete range of specially designed tools

Maximum visibility.

Choice of tapered drum with reverse laser marking.
Set the drum to the value recommended by the manufacturer and stop at zero.
(DMP.360, DM.360L, D.360L).

Easier to attach.

Wide range of drum-locking accessories.
Clamp, magnet, 3 limit stops (24, 45 and 65 mm).



Facom offers a complete range of tools to fit all vehicles

Angular torque gauge 1/2"

DMP.360L

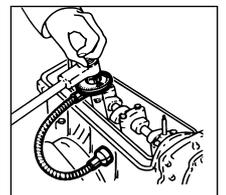
- Complete kit comprising 3 limit stops (24, 45, 65 and mm long), a flexible arm with a clamp and a magnet
 - Dimensions : 375 x 180 x 145 mm.
- ΔΔ : 550 g.



Angular torque gauge

- 2° graduations.
- Drive drive.
- Fixed point by flexible arm with magnet.

	<input checked="" type="checkbox"/> "	Ø mm	L mm	ΔΔ g
DM.360	1/2	63	410	350
DM.370	3/4	73	430	550



Side-graduated angular torque gauge 1/2"

D.360L

- Tapered side-graduated drum for maximum ease of reading.
 - Double index (red line) for presetting. To tighten, simply align the two markers
 - 2° resolution.
 - Supplied with 24, 45 and 65 mm limit stops.
- ΔΔ : 414 g.



Side-graduated angular torque gauge with flexible arm and magnet \square 1/2"

DM.360L

- Supplied with a flexible arm and a magnet.
- $\Delta\Delta$: 500 g.



► Pistons - piston rings

Piston ring compressors

- For easy insertion of piston into cylinder bore and even compression over full ring length.
- Ratchet mechanism.
- Complete with key \square 6 mm.

	\varnothing mm	L mm	$\Delta\Delta$ g
750.TB	55...110	80	260
750.KB	100...160	80	300

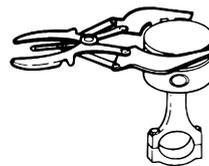


Piston ring pliers

751.T

- Even expansion over full ring length.
- Quick and easy to use.

	\varnothing mm	L mm	$\Delta\Delta$ g
751.T	45...100	210	280

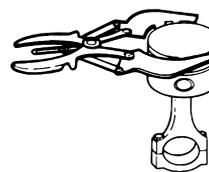


Piston ring pliers

751.K

- Even expansion over full ring length.
- Quick and easy to use.

	\varnothing mm	L mm	$\Delta\Delta$ g
751.K	90...150	255	330



► Removal

Set of exhaust rubber stretchers

DE.35A

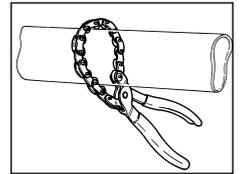
- Helps fit mounting rubbers after exhaust system replacement.
- Can also be used to remove hub caps.
- Set comprises two tools :
 - DE.3A Short hook.
 - DE.5A Long hook.
- Length : 250 mm.
- ΔΔ : 230 g.



Chain pipe cutter

DE.7

- For exhaust systems requiring partial replacement only.
- Filter diameter : Ø 38 to 95 mm.
- Dimensions : 315 x 60 mm.
- ΔΔ : 560 g.



🔧	Description
DE.7-1	Spare chain

PSA exhaust collar pliers

DE.C

- Bi-material grip, for opening exhaust collars.

🔧	Opening maxi mm	Length mm
DE.C	60	300



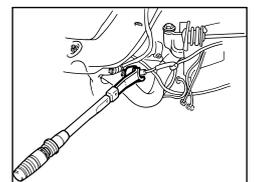
► Lambda probe

Lambda probe tools

- For use on lambda sensors, featuring a slot for the connecting lead.

- D.145A Short-reach socket :
 - 22 mm 6-point, drive : \square 1/2".
- D.146A Long-reach socket :
 - 22 mm 6-point, drive : \square 1/2".
- D.147 Straight open-ring wrench :
 - 22 mm 12-point, end fitting : 7 x 20 mm.
- D.148 Offset open-ring wrench :
 - 22 mm 12-point, end fitting : 7 x 20 mm.
- D.167 Wrench :
 - 22 mm 12-point, end fitting : 7 x 20 mm.
- D.168 Wrench :
 - 22 mm 12-point, end fitting : 7 x 20 mm.

N.B. Lambda probes must be torqued to manufacturers specified values.



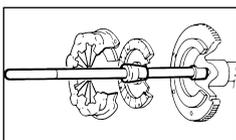
🔧	a x b x c mm	Ø mm	ΔΔ g
D.145A	-	33 x 85	200
D.146A	-	33 x 85	230
D.147	190 x 40 x 18	-	180
D.148	121 x 40 x 40	-	140
D.167	135 x 115 x 38	-	120
D.168	114 x 55 x 38	-	130

Gearbox and clutch

Universal clutch aligner

U.25A

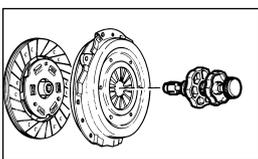
- Bush and cone system.
- Comprising :
 - 1 guide spindle
 - 11 bushes $\varnothing 12$ to 22 mm.
 - 3 cones $\varnothing 25$, 30 and 40 mm.
- Supplied in steel case.
- Dimensions : 322 x 136 x 53 mm.
- $\Delta\Delta$: 1.14 kg.



Universal clutch aligner

DM.30

- Centres and holds clutch friction and pressure plates.
- Supplied complete with 3 expansion tapers.
- Taper for. $\varnothing 18$ to 21 mm.
- Taper for. $\varnothing 22$ to 25 mm.
- Taper for. $\varnothing 14.5$ to 18 mm.



Inside and outside circlip® pliers

470

- Interchangeable tips for :
 - $\varnothing 8$ to 63 mm for outside circlips® .
 - $\varnothing 3$ to 63 mm for inside circlips® .
- Comprising :
 - 469.PA Inside-circlip® pliers.
 - 467.PA Outside circlip® pliers.
 - 82.2.5 key.
 - Set of 18 removable tips.
 - Supplied in a plastic case.
- $\Delta\Delta$: 1.5 kg.



	Description
467.01AJ2	Set of spare screws



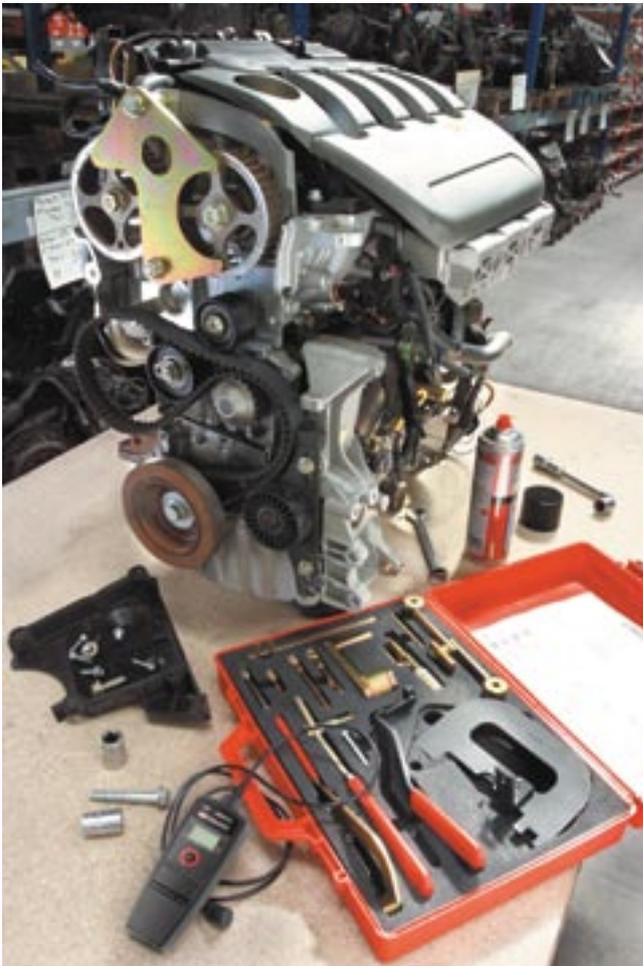
18 Timing - pulleys - belts

► Diesel engine and fuel pump timing

DT series

TIMING ADJUSTMENT

Automotive ▲



SPEED AND ACCURACY

For safe accurate timing adjustment.

The ignition timing of modern multi-valve petrol and high pressure diesel engines requires accurate adjustment

Inaccurate adjustment can lead to :
- over-consumption, engine breakage, malfunction, pollution, etc.

On many modern twin-cam engines, at least one of the two pulleys will turn when the timing belt is removed :

- the method of aligning timing marks is no longer appropriate.

Poor timing adjustment will at the very least cause engine malfunction, requiring the work to be restarted :
- the use of timing tools really does save time.

For all of these reasons, it is essential to immobilise the engine when readjusting timing or changing the timing belt.

The right equipment ensures profitability

With a separate kit for each make or range of engines, you only buy the tools that you need.

The kits are defined according to the European vehicle fleet and timing belt sales statistics.



A clear and precise method.

Each kit comes with precise instructions that are sufficient for changing a timing belt or chain, or for adjusting the timing.

Regular updates :
See www.facom.com
for our latest products and applications.

FO8

Timing - pulleys - belts

▶▶ Timing kit

PSA petrol and diesel engine timing kit

DT.PSA-A

- Covers most of the PSA group's petrol and diesel engines.
- Metal case
- Instruction manual with vehicle application guide in seven languages. (FR, DE, GB, ES, P, IT, NL).

	Height mm	Width mm	Depth mm	ΔΔ kg
DT.PSA-A	55	450	315	4,96



VAG petrol and diesel engine timing kit

DT.VAG-A

- Covers most of the VAG group's petrol and diesel engines.
- Metal case
- Instruction manual with vehicle applications guide in seven languages. (FR, DE, GB, ES, P, IT, NL).

	Height mm	Width mm	Depth mm	ΔΔ kg
DT.VAG-A	55	450	315	5,25



BMW petrol and diesel engine timing kit

DT.BMW

- Metal case.
- For petrol and diesel engines.
- Instruction manual with vehicle applications guide in seven languages. (FR, DE, GB, ES, P, IT, NL).

	Height mm	Width mm	Depth mm	ΔΔ kg
DT.BMW	55	410	285	6,52



Renault Diesel DCI timing kit

DT.DCI

- 9-piece timing kit.
 - >> For DCi engine
 - Supplied with operating instructions and vehicle application guide.
 - Dimensions : H50xL270xD230 mm.
- ΔΔ : 1.8 kg.



FIAT diesel engine timing kit

DT.FIAT-D

- Covers most FIAT diesel engines.
- Metal case.
- Instruction manual with vehicle applications guide in seven languages. (FR, DE, GB, ES, P, IT, NL).

	Height mm	Width mm	Depth mm	ΔΔ kg
DT.FIAT-D	55	282	230	2,97



18 Timing - pulleys - belts

Timing kit for FIAT 1.2L to 1.6L petrol engines

DT.FIAT-P

- Metal case.
- For working on FIAT 1.2L to 1.6L petrol engines
- Instruction manual with vehicle applications guide in seven languages. (FR, DE, GB, ES, P, IT, NL).

	Height mm	Width mm	Depth mm	ΔΔ kg
DT.FIAT-P	55	350	270	4,14



Renault engine timing kit

DT.REN

- Supplied with operating instructions and vehicle application guide.
- >> R5, R9, R11, R19, R21, R25, Clio, Twingo, Megane/Scenic, Laguna, Safrane, Velsatis, Espace, Express, Kangoo, Traffic Master.
ΔΔ : 4.330 kg.



Timing kit for FIAT 1.8L to 2.00L petrol engines

DT.FIAT-P2

- Instruction manual with vehicle applications guide in seven languages. (FR, DE, GB, ES, P, IT, NL).
- Metal case.
- For working on FIAT 1.8L to 2.0L petrol engines

	Height mm	Width mm	Depth mm	ΔΔ kg
DT.FIAT-P2	55	350	265	3,45



Ford engine timing kit

DT.FORD

- Supplied with operating instructions and vehicle application guide.
- >> Fiesta, Escort, Focus, Puma, Mondeo Cougar, Orion, Sierra, P100, Courier, Kombi, Transit Galaxy.
• Dimensions : H60xL240xD270 mm.
ΔΔ : 1.500 kg.



Opel engine timing kit

DT.OPEL

- Supplied with operating instructions and vehicle application guide.
- >> Corsa, Tigra, Meriva, Astra, Vectra, Zafira, Omega, Frontera, Agila, Nova, Monterey, Midi.
• Dimensions : H100xL330xD390 mm.
ΔΔ : 3.900 kg.





DT.XX - Timing kit upgrades.

KEEP YOU TIMING KITS UP TO DATE

Facom upgrade kits, for completing your equipment.



See the Facom web site for details
of our latest offers :
www.facom.com



Additional update kit for DT.PSA users

DT.PSA-U

- For upgrading from DT.PSA to DT.PSA-A.
- Only for owners of DT.PSA kits.
- Large metal storage case with free slots for DT.PSA kit components.
- Instruction manual with vehicle applications guide in seven languages. (FR, DE, GB, ES, P, IT, NL).

	Height mm	Width mm	Depth mm	ΔΔ kg
DT.PSA-U	55	450	315	3,14



Additional upgrade kit for DT.VAG users

DT.VAG-U

- For upgrading from DT.VAG to DT.VAG-A.
- Only for owners of DT.VAG timing kits.
- Large metal storage case with free slots for DT.VAG kit components.
- Covers most of the VAG group's petrol and diesel engines.
- Instruction manual with vehicle applications guide in seven languages. (FR, DE, GB, ES, P, IT, NL).

	Height mm	Width mm	Depth mm	ΔΔ kg
DT.VAG-U	55	450	315	3,14



18 Timing - pulleys - belts

Diesel injection pump timing kit

DT.DIESEL

- Supplied with operating instructions and vehicle application guide.
>> Bosch type VE, EPVE, KIKI, NIPPONDENSO, CAV, LUCAS, ROTODIESEL.
- Dimensions : H50xL200xD230 mm.
- ΔΔ : 700 g.



Universal pulley stay kit

DT.BLOC

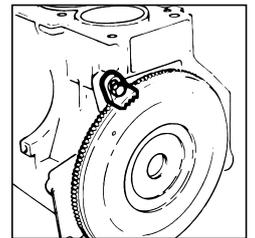
- Supplied with operating instructions
For securing double or single camshaft and injection pump pulleys in place.
- Dimensions : H100xL190xD280 mm.
- ΔΔ : 1.2 kg.



Flywheel stay

D.86

- Dimensions : 30 x 46 x 25 mm.
- ΔΔ : 21 g.



New

BMW pump puller

DT.P

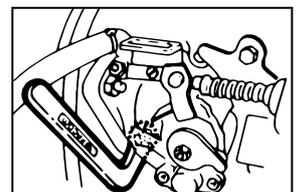
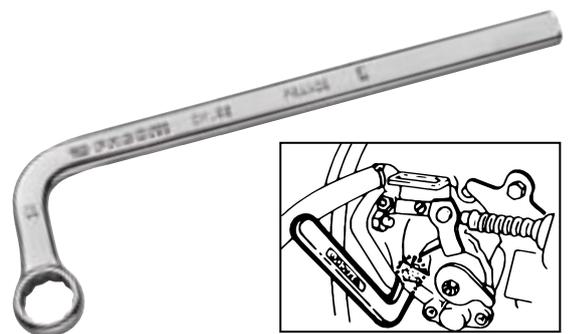
- For removing the VP44 and High Pressure Common Rail pumps of BMW vehicles.



Injection pump wrench

DM.22

- >> ALFA ROMEO, AUDI, CITROËN, CHRYSLER, FIAT, FORD, NISSAN, OPEL, PEUGEOT, RENAULT, ROVER, SEAT, VOLKSWAGEN, VOLVO.
- 13 mm 12-point.
- Dimensions : 170 x 55 x 8 mm.
- ΔΔ : 90 g.



► Pulleys - sprockets - belts

►► Belt tension testing



DT.HERTZ - Belt tension tester.



THE RIGHT TENSION GUARANTEED

Avoid breakage

The correct belt tension is essential :

- If insufficiently tight, the auxiliary belts will slip and become worn. Timing belts may jump (engine breakdown)
- If over-tightened, the forces will damage the rollers and pumps.
- Risk of premature belt failure.

Easy, accurate testing

Simply place the ultra-compact sensor against the belt and induce a vibration in the belt (like a guitar string).

Compare the displayed reading with the recommended value in the guide.

Regular updates.

The DT.DOC guide is regularly updated. See www.facom.com for the reference number of the latest version.

Multi-make electronic belt tension-meter

DT.HERTZ

- Quickly and easily checks the tension of timing and auxiliary belts.
- The tension meter comes with a reading conversion guide allowing the vehicle repairer to validate the adjustments.
- Can be used for all belts on the market.
- Compact, manoeuvrable tool, can be operated one-handed.
- Cable length : 1,200 mm.
- Case LxWxH (mm) : 135x50x28.

ΔΔ : 150 g.

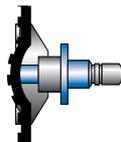


Timing belt tension meter

DM.16

- For checking timing belt tension.
- Comes with 6 interchangeable ends, a belt thickness measuring gauge and a calibration checking gauge.
- Dimensions : 170 x 120 x 50 mm.

ΔΔ : 420 g.



6-piece pin set

DT.PIN

- Set of pins for keeping automatic tensioners compressed while working.
- Supplied with vehicle application list
- Dimensions : 140 x 50 x 35 mm.

ΔΔ : 30 g.



►► Pulley pulling



DM.50 - Multi-groove pulley puller.

Avoid engine dismantling

Compact.

Compact puller for removing multi-groove crankshaft pulleys.

Essential for replacing the timing belts of most RENAULT engines



Multi-diameter damper pulley puller

DM.50

- Removes crankshaft multi-groove pulleys without damage.
- Lockable, adjustable legs to fit the various pulley sizes from 45 to 175 mm diameter.
- Compact design for working on engine in situ.
- Pulley capacity : Ø 45 to 175 mm.
- No groove : 3.56 mm.
- ΔΔ : 1.12 kg.



Multi-diameter timing and injection pump pulley puller

DM.17A

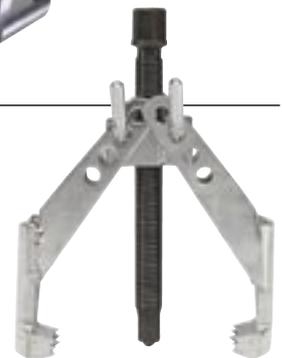
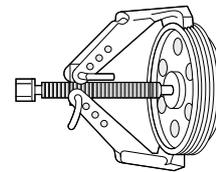
- Removes pulleys without damage.
- Adjustable legs adapt to differing pulley diameters.
- Compact design for working on engine in situ.
- Dimensions : 90 x 110 mm.
- ΔΔ : 925 g.



Pulley puller

DM.31

- For removing crankshaft pulley by gripping the pulley grooves.
- Pulley capacity : Ø 130 to 156 mm.
- ΔΔ : 1.05 kg.



►► Pulley stay

Pulley stay

DM.8

- For blocking multi-groove pulleys.
- Can serve to for crank an engine.
- Capacity Ø 40 to 140 mm.
- Handle length 350 mm.
- ΔΔ : 780 g.



Universal pulley wrench

DT.CLE

- For blocking, cranking and holding camshaft and injection pump pulleys.
- Length : 410 mm.
- ΔΔ : 950 g.



► Inspection

Disc brake vernier caliper

DF.18-01

- Vernier caliper for checking the thickness of brake discs.
- Accurate, error-free reading.
- Measurements can be taken with wheel in place (if no protective bodywork).
- Can quickly demonstrate to customers the need for changing brakes.
- Supplied in a reinforced fabric case with serial number for traceability in ISO certified workshops.
- Capacity 0 to 50 mm, outer thickness measurement for the disc brakes of cars and LCVs.
- Nose length : 50 mm.
- 0.1 mm reading increments.
- Mechanical memory device.

ΔΔ : 250 g.



Drum brake vernier caliper

DF.19-01

- Capacity and reading to suit the requirements of car, LCV and HGV applications.
- Supplied in a reinforced fabric case with serial number for traceability in ISO certified workshops.
- Capacity 40 to 300 mm, inner drum measurement for cars and LCVs.
- Nose length : 100 mm.
- 0.20 mm reading increments for internal drum measurements.
- 0.10 mm increments for readings between tips.

ΔΔ : 700 g.



DF.16

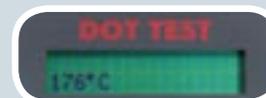
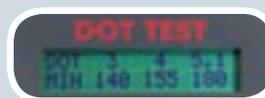
QUICK BRAKE FLUID TESTER

**A quick, cost-effective analysis.
For the safety of your customers.**

- Water in the brake fluid can turn into vapour under severe or repeated braking, making the brake pedal ineffective.

The boiling point of brake fluids must exceed a specified minimum value :

DOT 3	140°C
DOT 4	155°C
DOT 5.1	180°C



Brake fluid tester

DF.16

- For testing brake fluids (DOT3, DOT4, DOT5.1).
- Measures brake fluid boiling point.
- Automatic test lasting up to 1 min.
- LCD display.
- °C/°F switch.
- Accuracy : 3 %.
- Air supply : 12 V (vehicle battery).
- Supplied in a plastic case
- Dimensions : 350 x 285 x 80 mm.

DF.16-02	Description
	Set of 10 pipettes



Dual-gauge brake pressure tester

DF.8

- For testing compensator operating pressures and diagonally-split brake systems.
- Max. pressure : 200 bar.
- Accuracy : $\pm 1\%$.
- Hose : \varnothing int. 2 mm.
- Length : 1 x 3 m / 1 x 5 m.
- Supplied complete with fittings and storage case.
- Dimensions : 375 x 270 x 75 mm.
- $\Delta\Delta$: 2 kg.



► Diagnostics and bleeding



Brake bleeding : a safety requirement

FAST AND EFFICIENT

Brake bleeding is an operation that takes 10 to 15 minutes with a modern appliance such as the DF.20-100 or DF.21. A single operator is able to fill and bleed the brake system.

A profitable operation for the workshop.

A brake bleeder is very quickly cost-effective, and its cost is absorbed in under 50 operations.



Safety first

It is recommended to replace the brake fluid once every two years or after 40,000 km depending on the manufacturer.



Brake and clutch system bleeder

DF.20-100

- For bleeding car and LCV brakes and HGV clutches
- ABS compatible.
- Helps hydraulic system leak detection.
- Portable, stand-alone appliance (12 V).
- Liquid drawn by peristaltic pump action, avoiding contact between the fluid and the moving parts of the pump.
- Automatic pressure regulator (automatically keeps the working pressure below 2 bars for ABS systems).
- Reservoir with visible level and min. level indicator
- Filter diameter : 5 l.
- Body : stainless/ABS
- Length of hose and power cable : 4 m.
- Metal accessory storage case.
- 1 multi diameter plug for using the bleeder on vehicles with a bayonet plug (DF.20-12).
- 1 screw plug with 90° connection (DF.20-07).
- 1 fluid collector with attaching chain.
- $\Delta\Delta$: 11 kg.





Electronic pressure control

POWER AND PRECISION

Efficiency and precision.

Changing a hydraulic antilock unit involves refilling the system and the unit at low pressure.

It is therefore essential to be able to accurately maintain the required pressure on the brake bleeder by means of an efficient electronic control system.

Power and flow rate.

More power and a higher flow rate are needed for for bleeding HGV clutch systems :
The pump of the DF.21 bleeder is suitable for such applications.



Adjustable-pressure electronic brake bleeder

DF.21

- For bleeding car and LCV brakes and HGV clutches
 - Pressure adjustment from 0.5 to 3 bar.
 - Up and Down pressure adjustment keys.
 - Electronic pressure control holds pressure steady at the selected value.
 - ABS compatible.
 - Portable, stand-alone appliance (12 V).
 - Reservoir with visible level.
 - Automatically stops below minimum level.
 - Capacity : 5 l.
 - Body : stainless/ABS
 - Length of hose and power cable 4 m.
 - Metal accessory storage case.
- 1 multi diameter plug for using the bleeder on vehicles with a bayonet plug (DF.20-12).
1 screw plug with 90° connection (DF.20-07).
1 fluid collector with attaching chain.
- ΔΔ : 11 kg.



New



Universal plug for bleeding brakes and clutches of LVs and HGVs.

DF.20-12

- Can be used for bleeding the brakes and clutches of 90 % of vehicles.
- Claw system overcomes the many different bayonet shapes and different types and diameters of screw threads used by the various vehicle manufacturers.
- Fits most Asian makes (except Honda).
- Can also be used for bleeding HGV clutches .
- Working diameter : 35 to 83 mm.
- Minimum clearance required above the jar : 80 mm.
- Maximum working pressure of the bleeder : 3 bar.
- Connection by Rectus series 21 male coupling.
- Dimensions : 115 x 195x 85 mm.

ΔΔ : 475 g.



Aluminium brake bleeder plug

DF.20-07

- Special thread fits Ø 44 and 45 mm.
- 90° swivel connection.
- Minimum clearance required above the jar : 40 mm.
- Used with DF.20 or DF.21 to automatically replenish the brake fluid jar.

ΔΔ : 70 g.



► Disc brakes

DF.17

Pneumatic disc brake piston pushing/turning tools

Essential for replacing brake pads.

Quick and easy to use

The pneumatic cylinder holds the flange against the head of the brake piston and the long handle allows the piston to be wound-back in a clockwise or anti-clockwise direction with minimum effort.



Saves time.

The special Facom flange design covers the entire European vehicle fleet with only 6 flange types, minimising the number of flange changes and saving time.

New

Pneumatic disc brake piston pushing/turning tool

DF.17

- Pneumatic cylinder for retracting and rotating the piston.
 - Frequency of use : at each brake pad replacement.
 - Supplied in a plastic case with operating instructions and application guide.
 - Compatible with flanges DF.6A.
 - Can be used on clockwise and anti-clockwise pistons.
 - Max. pressure 6.2 bars, 1/4" NPT Diameter 10 mm 3/8".
- ΔΔ : 2.28 kg.



New

Disc brake piston winding-back set

DF.17-100

- Comprising :
 - 1 DF.17 air tool.
 - 6 flanges DF.6-2 / DF.6-3 / DF.6-4 / DF.6-5 / DF.6-8 / DF.6-9.
 - Covers the majority of the European fleet
 - Supplied in a plastic case with operating instructions and application guide.
- ΔΔ : 2.83 kg.



Disc brake module

MOD.DFPB

- Comprising :
 - D.60A Brake piston pliers.
 - DF.3 Wire brush.
 - DF.4 Caliper file.
 - 249.G4/5/6 drift punches with shock-absorber handle.
 - 43.8x10 / 11x13 Flare-nut wrenches.
 - Tray PL.629
- ΔΔ : 1.22 kg.



Wire brush.**DF.3**

- For cleaning calipers.
- Dimensions : 225 x 45 x 15 mm.
- ΔΔ : 65 g.

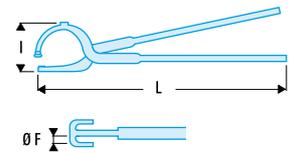
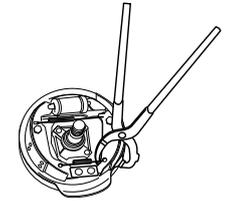
**Special file****DF.4**

- For cleaning calipers.
- Length : 265 mm.
- ΔΔ : 110 g.

**▶ Drum brakes****196 Brake-spring pliers**

- For removing shoe springs.
- Suitable for right-handed and left-handed working.

Ref	Ø F mm	L mm	l mm	ΔΔ kg
196.TS	3	350	83	0,58
196.KS	5	485	100	1,23

**Drum brake servicing module****MOD.196-1**

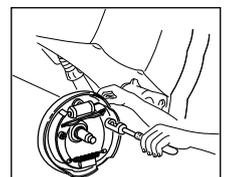
- 196.TMS Brake-spring pliers.
- D.104A Steady-spring tool.
- D.79A Hand-brake pliers.
- T.243 Set of 4 brake cylinder clips.
- Tray PL.628
- ΔΔ : 1.53 kg.

**Hand-brake pliers****D.79A**

- For easy hook-up of hand-brake cable.
- Length : 230 mm.
- ΔΔ : 180 g.

**Steady-spring tool****D.104A**

- Fits steady-spring caps for compression against drum-brake shoes.
- >> All makes.
- 240 x Ø 34 mm.
- ΔΔ : 240 g.



► Brake lines



Brake line renewal



REFORM FLANGES AS NEW

A complete set of brake line renewal tools.

Press 347 can be used to form all types of SAE or DIN flanges on the workbench. It is particularly suitable for LCVs and HGVs.

The DF475 hand press can be used directly on light vehicles to reform flanges, without the need to remove the entire pipe.



Flange press

DF.475

- Specifically designed for flanging (Ø 4.75 mm) automotive brake lines.
- SAE or DIN fittings are formed easily with the help of its 3 T hydraulic jack.
- Compact size allows working in situ on vehicles.
- Ø 4.75 mm.
- Dimensions : 212 x 200 x 75 mm.
- ΔΔ : 1.1 kg.



Flange press set for S.A.E, DIN, S.A.E./DIN fittings

347

- For copper and steel pipework Ø 4.75 to 12 mm; 3/16" to 1/2".
- Wall thickness : 0.7 to 1 mm.
- Press can be secured in a vice for increased stability.
- Fast and effortless forming.
- Kit includes 11 punches and 10 dies.
- Instructions explain selection according to flange type.
- Steel case : 396 x 224 x 82 mm.
- ΔΔ : 7.9 kg.



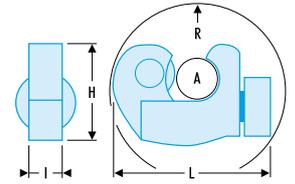
3 - 16 mm mini pipe-cutter

238.16

- Very compact.
- Can be used in situ.
- Minimal working radius.
- 238A.16 : grey.

ΔΔ : 120 g.

➤	mm	A "	R mm	H mm	I mm	L mm	ΔΔ g
238A.16	3 - 16	1/8 - 5/8	38	35	21	55	120

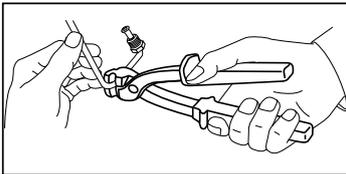


Pipe bender

DFR

- For pipework Ø 4.75 mm, to shape and hold brake lines when tightening a union.
- Length : 235 mm.

ΔΔ : 410 g.



Metric flare-nut wrench module

MOD.43

➤	Comprising	Tray	ΔΔ g
MOD.43	43.7x9 - 8x10 - 11x13 - 12x14 - 17x19	PL.635	960



► Strut removal



Removal of MacPherson strut support arms

SAFETY AND EFFICIENCY

Fast

- Allows one person on their own to quickly remove the MacPherson strut from the clamp.
- No risk of transmission disconnection.
- Base fitted with a ball joint allowing the stand to take-up the angle of the shock-absorber and transfer load axially.

Safe

- For removing and installing struts without a lever, without knocking and with no risk of slippage or damage.



• Easy to remove.



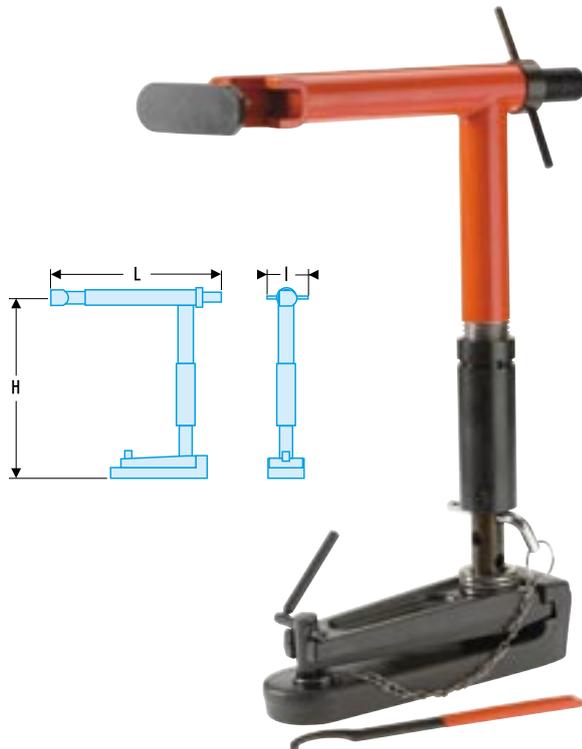
• Ball joint for axial load transfer.



MacPherson strut removal stand

DLS.50

- Allows one person to safely remove MacPherson strut support arms.
 - No risk of damage to the front axle : avoids the risk of damage to the brake system corrosion protection, tripod disconnection (loss of needle bearing) , transmission separation (loss of gearbox oil).
 - Post supported on ball joint allowing pushing force to be applied along the axis of the strut.
 - For MacPherson struts 46 mm to 65 mm Ø.
 - Max. travel to release strut from clamp : 90 mm.
 - Maximum effort : 550 Nm.
- >> Citroen, Ford, Peugeot, Renault, VAG Group.



	H min - max mm	L mm	I mm	$\Delta\Delta$ kg
DLS.50	495 - 740	420	150	14,5



MacPherson clamp separator set

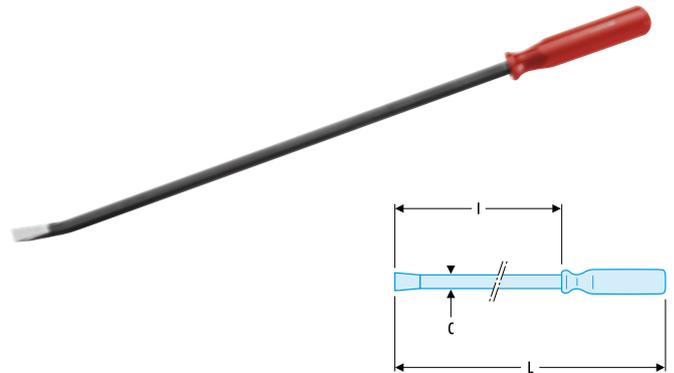
DS.J5

- Comprising :
 - DS.10A : 7.5 x 9 mm.
 - DS.11A : 5.2 x 6.9 mm.
 - DS.12A : 6.6 x 7.9 mm.
 - DS.13 : 4.3 x 6 mm.
 - DS.14 : 12.7 x 16.7 mm.
 - DS.P : 3/8" (9.53 mm) square drive operating handle.
 - J.236 : Bit holder
 - Helps open the clamp on vehicles fitted with MacPherson struts.
 - Allows shock-absorbers to be stripped down at the work bench.
 - Fast and efficient.
- >> all vehicles fitted with removable clamps (Citroen, Peugeot, Ford, VAG, Audi).
- A "junior" series ratchet can be used instead of the handle (space provided in the case).



D.3 Power levers

- Sturdy blade minimizing lever spring effect.
 - Dimensions 670 x 145 x 40 mm.
- ΔΔ : 1.648 kg.



➤	L mm	l mm	C* mm	ΔΔ kg
D.3-7	292	165	3/8	0,275
D.3-12	422	305	3/8	0,345
D.3-18	635	460	1/2	0,81
D.3-24	787	610	1/2	1,03
D.3-30	915	740	5/8	1,71

Set of 3 power levers

D.3J3

- Sturdy blade minimizing lever spring effect.
- Many uses : suspension, running gear, bodywork, etc.
- Presented on a blister tray.
- Set comprising one D.3-7, one D.3-12 and one D.3-18.
- Dimensions 670 x 145 x 40 mm.
- ΔΔ : 1.648 kg.



Compressors

U.89

SPRING COMPRESSORS

A CHOICE FOR EVERY NEED

Mechanical compressor : Safe compression with an impact wrench.

- The compressor's new internal mechanical mechanism is designed to work with a 1/2" impact wrench.
- A shear pin on the hexagonal drive screw protects the operator against excessively high torques.

Hydraulic compressor : higher productivity.

- Maximum power, minimum effort.
- Leaves both hands free when placing the tool.



The most universal system.

The most extensive coverage of the European vehicle fleet equipped with MacPherson struts, with only five sets of forks.

Our vehicle applications list, tested and checked by us, covers 36 makes of vehicle, 360 models and hundreds of versions (at 1/12/06).

The system is continuously being tested on vehicles, and new vehicles are added to our data base each week :

see it on www.facom.com.



Safety first

The safe choice :

Choose a compressor that is suited to current spring strengths, with a body failure limit of 100,000 N, LNE and CE tested.



Hydraulic compressor

U.89H2JM

- Comprising :
 - Body U.89H2.
 - Set of multiple diameter forks U.89JM.
- For spring \varnothing 100 to \varnothing 215 mm.
- $\Delta\Delta$: 11.5 kg.



Hydraulic compressor + 3 sets of forks J1, J2, and J3

U.89H30

- Two-stage screw-operated telescopic body (22 mm hexagonal drive).
- Movable spacer allowing the forks to be used in 2 positions.
- Tested to 100,000 N.
- Travel : 235 mm.
- Supplied with 3 pairs of plastic-coated forks J1, J2, and J3
- CE.
- Dimensions : Compressed length : 305 mm.
- Extended length : 540 mm.
- Diameter : 70 mm.
- $\Delta\Delta$: 11.5 kg.



Hydraulic body

U.89H2

- Two-stage hydraulic cylinder operated telescopic body.
- Travel : 245 mm.
- 3/8" NPT threaded connection
- Body fitted with spacer.
- Tested to 100,000 N, allowing 2 different fork positions for a perfect fit on springs with a small number of coils.
- CE.



Mechanical pump

WV.M401

- Dual pedal-operated (pressure and relief) 400 bar hydraulic pump.
- Foot controlled, leaving the operator with both hands free for greater safety and efficiency.
- 300 cm³ capacity.
- Ideal pump for 4 - Tonne series hydraulic accessories and spring compressors U.89H
- Supplied complete with WA.1165A 1.20m hose and female quick coupler.
- $\Delta\Delta$: 6.5 kg.



Code	Description
WA.21	Hydraulic oil - 2 litres
WA.1165A	Hose 1.20 m
WA.1166F	3/8" female coupler

Mechanical compressor with multi-diameter forks

U.89M2JM

- Comprising :
 - U.89M2 Mechanical body with 2 position spacer.
 - U.89JMA Pair of multi-diameter forks for spring \varnothing 100 to 215 mm.
- Supplied with operating instructions and vehicle application guide.
- $\Delta\Delta$: 11.6 kg.



Spring compressor Universal system with interchangeable forks

U.89M30

- Two-stage screw-operated telescopic body(22 mm hexagonal drive).
- Movable spacer allowing the forks to be used in 2 positions.
- Can be used with a 1/2" impact wrench.
- Body tested to 100,000 N.
- Travel : 235 mm.
- Compressed length : 305 mm.
- Extended length 540 mm.
- 70 mm diameter.
- Supplied with 3 sets of plastic-coated forks J1, J2, and J3
- CE.

ΔΔ : 14.7 kg.



Mechanical body

U.89M2

- Two-stage screw operated telescopic body.
- 22 mm hexagonal drive. Can be used with a 1/2" electric or pneumatic impact wrench.
- Tested to 100,000 N.
- Spacer provides an optional lower fork position for maximum travel on springs with a small number of coils.
- Can be used with all U.89 forks.
- Travel : 235 mm.
- Extended length : 540 mm.
- Compressed length : 305 mm.
- Diameter : 70 mm.

ΔΔ : 5.1 kg.



Mini mechanical set

U.89M20

- Comprising :
 - U.89M Mechanical body.
 - U.89J1 Set of forks.
 - U.89J2 Set of forks.
- Supplied with operating instructions and vehicle application guide.

ΔΔ : 14.7 kg.



Standard mechanical set

U.89M30

- Comprising :
 - U.89M Mechanical body.
 - U.89J1 Set of forks.
 - U.89J2 Set of forks.
 - U.89J3 Set of forks.
- Supplied with operating instructions and vehicle application guide.

ΔΔ : 19.1 kg.



Mechanical body

U.89M

- Two-stage screw operated telescopic body.
- 22 mm hexagonal drive.
- Can be use with an electric or mechanical impact wrench.
- Tested to 100,000 N.
- Fitted with a safety pin.
- Can be used with all U.89 forks.
- Travel : 235 mm.
- Extended length : 540 mm.
- Compressed length : 305 mm.
- Diameter : 70 mm.

ΔΔ : 5 kg.





Vehicle applications

FOR YOUR SAFETY, CHOOSE THE RIGHT FORK

With each compressor

Our spring compressors and suspension workstations are supplied with a vehicle application list for existing forks according to vehicle make and model.

We constantly test new vehicles in order to recommend the most suitable fork to use.

Checking the recommended fork before removing a shock-absorber will save time and ensure safety.

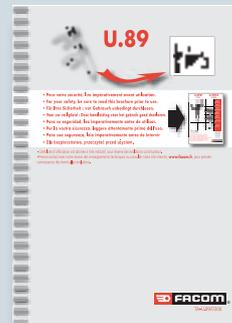


www.facom.com at your service

Vehicle application data is updated on our web site every month :

Section :

- service
- vehicle application guide
- suspension



Fork application list

TA-U.89/0606

- Updated U.89 spring compressor application list..
- Laminated manual, A5 format with perforations.
- 12 pages.
- 36 makes, 360 models, over 1,000 versions (European vehicle fleet).

ΔΔ : 25 g.



Multi-diameter fork set

U.89JMA

- Offset forks : grip the spring at the end of the coil, thus increasing the compressor's effective travel. This shape of fork is particularly effective for use on new-generation springs having a small number of coils.
- A hinged joint at the connection to the compressor allows the fork to be aligned with the slope of the coil.
- New design, forks fit directly onto the springs for quick installation.
- Suitable for 100 to 215 mm springs.
- Compatible with all U.89 bodies without modification.

ΔΔ : 6.6 kg.



Set of forks.

- Open design allows quick fitting of forks to the body and saves space when working on a vehicle.
- Spring positioning grooves.
- PVC-coated forks.
- Coating endurance tested to 10,000 cycles.



Logo	Color	Ø mini mm	Ø maxi mm	ΔΔ kg
	Yellow	99	156	4,14
	Red	129	174	4,43
	White	139	218	5,15
	Blue	71	119	3,6

Offset fork set

- Open design allows quick fitting of forks to the body and saves space when working on a vehicle.
- Spring positioning grooves.



Logo	Color	Ø mini mm	Ø maxi mm	ΔΔ kg
	Pink	145	170	4,33
	Green	170	195	5

► Workstation

DLS.300

WORKSTATION

FOR EASIER AND SAFER SERVICING

No compressor to carry

- The strut fits easily in the jaws of the compressor.

Your safety assured

- You are protected by a reinforced steel safety gate that is easily lowered once the strut is in place.

All tools readily to hand

- All the tools necessary for changing shock-absorbers are within easy reach.
- The tools for removing the strut rods can be placed on a high-level shelf.
- All forks can be reached from both sides of the unit.
- Special storage locations are also provided for an impact wrench as well as a torque wrench.

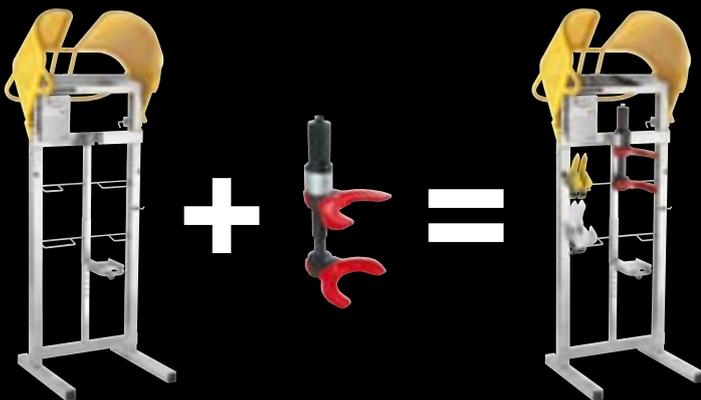


Can be used directly on the vehicle

- Certain specific models or certain rear suspension assemblies require servicing to be performed directly on the vehicle, in which case the compressor can instantly be removed from the workstation.

A gradual investment : from the spring compressor to the shock-absorber workstation.

- You can upgrade your Facom compressor by means of the DLS.300-03 adaptor that can receive all compressor bodies up to 55 mm in diameter.



New

Spring compressor workstation

DLS.300

- Designed to receive FACOM compressors U.89M2 and U.89H2.
 - Can accommodate up to 6 sets of forks.
 - Impact wrench storage space.
 - Space for set D.83C (new XL module).
 - Space for application list
 - Hook for torque wrench.
 - Small plan dimensions : 540 x 570 mm.
 - Closed height 1,410 mm max. height 1,726 mm.
 - Supplied with operating instructions and vehicle application guide.
- △△ : 35 kg.



New

Spring compressor workstation

DLS.301

- Designed to receive FACOM compressors U.89M2 and U.89H2.
 - Can accommodate up to 6 sets of forks.
 - Impact wrench storage space.
 - Space for set D.83C (new XL module).
 - Space for application list
 - Hook for torque wrench.
 - Small plan dimensions : 540 x 570 mm.
 - Folded height 1,410 mm max. height 1,726 mm.
 - Supplied with operating instructions and vehicle application guide.
- △△ : 35.5 kg.



New

Spring compression workstation

DLS.302

- Comprises :
 - 1 workstation DLS.300.
 - 1 mechanical compressor body U.89M2.
 - 1 multi-diameter fork set U.89JMA.
 - Closed height 1,410, open height 1,726 mm, plan size 500 x 470 mm.
 - Supplied with installation and operating instructions, vehicle application guide.
- △△ : 46.5 kg.

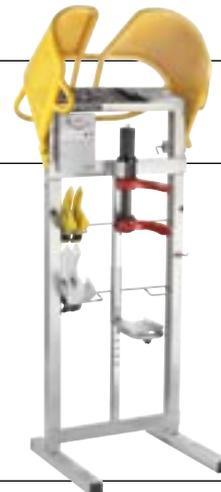


New

Spring compression workstation

DLS.303

- Comprises :
 - 1 workstation DLS.300.
 - 1 mechanical compressor body U.89M2.
 - 3 sets of forks : U.89J1, U.89J2, U.89J3.
 - Closed height 1,410, open height 1,726 mm, plan size 500 x 470 mm.
 - Supplied with installation and operating instructions, vehicle application guide.
- △△ : 54.1 kg.



New

Heavy-duty spring compression workstation

DLS.305

- Comprises :
 - 1 workstation DLS.300.
 - 1 hydraulic compressor body U.89H2.
 - 1 hydraulic pump WV.M401.
 - 1 protective plate for pump DLS.300-04 control.
 - 1 multi-diameter fork set U.89JMA.
- Closed height 1,410, open height 1,726 mm, plan size 500 x 470 mm.
- Supplied with installation and operating instructions, vehicle application guide.
- ΔΔ : 53.5 kg.



Compressor holder

DLS.300-03

- For attaching a compressor type U.89M or U.89H to workstation DLS.300.
- For bodies of max. 55 mm diameter.
- ΔΔ : 700 g.



Special workbench vice

D.22B

- For holding struts vertically on the workbench.
- Zinc finish.
- Dimensions : 410 x 190 mm.
- Ø max. : 65 mm.
- ΔΔ : 3.535 kg.

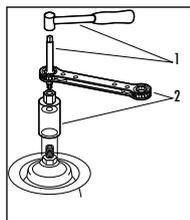
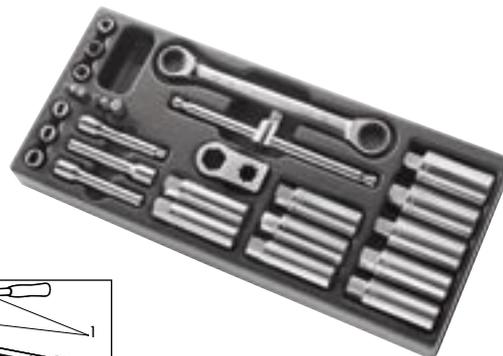


► Tools for shock absorbers

Set of 28 tools in modules for MacPherson strut rods

D.83C

- Comprising :
 - 10 long-reach sockets (14, 15, 16, 17, 18, 19, 21, 22, 24 mm).
 - Slotted bits (3 No.) 5, 6 and 8 mm.
 - 6-point sockets (3 No.) 8, 9 and 11 mm.
 - 1 magnetic bit-holder extension 7.94 mm.
 - 1 bit-holder extension 6.35 mm.
 - 1 extension with 8 mm square drive.
 - 5 bits : EH 6, 7 and 8 mm - EXR.140 and EX.245 - XZN EV.212.
 - 1 handle J.120.
 - 1 wrench 68.17x19.
 - 1 torque wrench adaptor.
- For holding the strut rod while tightening or loosening of the nut.
- For tightening with a torque wrench to a specified torque.
- Tool set can be extended to include other bits (Torx, XZN, 6- point).
- Supplied in modules for placing in the drawer of a roller cabinet or workbench. Empty spaces for additional tools.
- Presentation : Tray PL.647.
- Module XL.



Set of lug adaptors for VAG struts

D.84

- For loosening and tightening notched nuts on strut rods.
- >> AUDI : 80/90.
- >> SEAT : Terra/Ibiza/Marbella/Toledo/Cordoba.
- >> VOLKSWAGEN : Polo/Golf/Jetta/Passat/Vento
- ΔΔ : 70 g.



▶ Wheel removal and inspection

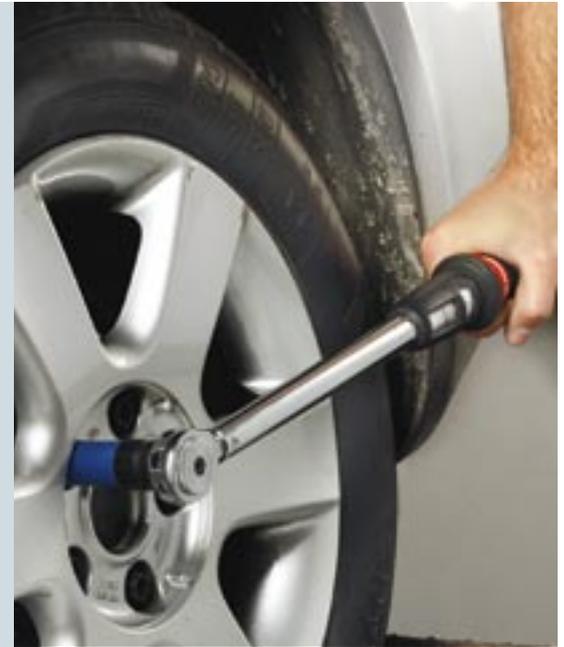


S.208 - Tightening torque

TORQUE-TIGHTENING OF WHEEL NUTS : ESSENTIAL FOR SAFETY

It is essential that wheel nuts are tightened to the manufacturers' recommended torques. Failure to do so can have the following consequences :

- Risk of deformation of screws or studs, the hub or the rim, possibly resulting in component failure.
- Problems removing the wheel with the OEM tools provided.



Wheel nut tightening module

MOD.208

- 77AT0D Cross brace.
 - S.208-200 Torque wrench 40-200 Nm.
 - Long-reach impact sockets : NSB.17 - 19 - 21 mm.
 - 6-point sockets : SH.17 - 19 - 21.
 - Tray PL.337
- ΔΔ : 5.47 kg.

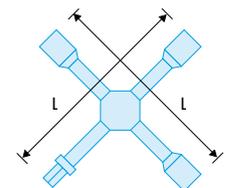


Cross braces

- Designed for removing wheel nuts on cars, light commercials and heavy goods vehicles.
- Replaceable bit on wrenches featuring a square drive.

Ref	∅ mm	>>	∅"	L mm	ΔΔ kg
77A.TO	17/19/23		1/2	400	1,75
77A.TO2	17/19/21		1/2	400	1,75
77A.TOD	17/19/22		1/2	400	1,75
77A.PL1	24/27/30/32		-	700	4,65
77A.PL2	24/27/33		3/4	700	4,58
77A.PL2D	24/27/32		3/4	700	4,60

Ref	Description
77.P1	Spare male 3/4" square bit
77.T1	Spare male 1/2" square bit



Air-line connector and gauge

U.179A

- To NF R 63-302 specifications.
 - Pressure range : 0 to 12 bar.
 - Impact-resistant rubber casing.
 - Dimensions : 250 x 120 x 80 mm.
- ΔΔ : 850 g.



Wheels - hub - transmission

Composite 1/2" impact wrench

NS.1800F

- Lightweight aluminium/composite body.
- Pressure and direction control knob.
- Double-hammer mechanism.
- Free speed : 8,000 rpm.
- Recommended dynamic torque : 65 - 550 Nm.
- Maximum dynamic torque : 813 Nm.
- Guaranteed static torque : 380 Nm.
- Impact rate (per minute) : 1,200.
- Average air consumption : 138 l/min.
- Air inlet thread : 1/4".
- Working pressure : 6.2 bars.



	a	b	c	$\Delta\Delta$
	mm	mm	mm	kg
NS.1800F	180	183	69	2,25

19.2V battery-powered 1/2" impact wrench

CL.C1913

- Always available for quick on-site repairs.
- Powerful, reliable latest generation 19.2 V motor.
- Trigger speed adjustment and power control.
- Accessible, removable carbon brushes enabling simple, immediate repair.
- Integral lighting system for perfect visibility in poorly lit working areas
- Battery locks onto the machine by means of a sliding rail system ensuring reliability, strength and durability of electrical contacts.
- Ni-MH batteries.
- Integral elastomer bumpers.
- For use with FACOM NS Impact series sockets.

Contents of set CL.C1913

- Impact wrench : CL.C1913D - Universal charger : CL.CH919
- 2 Ni-MH batteries : CL.BA19 - Operating instructions
- Weight of machine + battery : 3.1 kg.



	\square	a	b	c	$\Delta\Delta$
	"	mm	mm	mm	kg
CL.C1913	1/2	252	199	75,5	6,2

Set of long-reach thin wall sockets for alloy wheels

NSAL.3

- Comprising :
 - 3 impact sockets 17, 19, 21 mm.
 - Plastic coated to protect varnished alloys against impact damage.
 - The 3 sizes are immediately identifiable.
 - Supplied with a set of additional plastic protective sleeves (red, blue, yellow).
- $\Delta\Delta$: 775 g.



	Description
NSAL.3-01	Set of 3 protective plastic sleeves

Air-hose reel

N.708

- Hose stop and swivel bracket.
- Working pressure : up to 12 bar.
- Ø Hose bore : 8 mm.
- Hose length : 7.5 m.
- Dimensions : 302 x 285 x 135 mm.
- ΔΔ : 3.5 kg.



Valve core remover

D.93

- The swivelling head and fluted body derived from the Facom Micro-tech screwdriver simplifies valve core removal and fitting.
- Length 102 mm.
- ΔΔ : 15 g.



D.3 tyre-removers

- Double Tee section for added strength.
- Zinc and chrome-plated finish.

➤	L mm	ΔΔ g
D.3-300	300	200
D.3-400	400	400
D.3-500	500	570
D.3-600	600	900



▶ Wheel balancing



Zamak wheel-balancing weights (lead-free)

COMPLIANT WITH THE LEGISLATION

Since 1st July 2005, the use of lead is forbidden for the manufacture of wheel balancing weights (with the exception of motorcycles, vintage cars and vehicles having a maximum authorised weight of 3.5 T or more)

Zamak weights

- Zinc/aluminium alloy.

Small service boxes

- Pre-divided boxes of 50 and 25 weights.
Quantities adapted to the needs of repair workshops, avoiding overstocking.



Wheels - hub - transmission

ERZ Multi-purpose balancing weights for steel rims

- New profile suitable for attaching to the main types of steel rim (semi-rolled and rolled edges, flat edge rims).
 - 3 times less weights to be stocked.
 - Zamac (zinc/aluminium alloy) weights
 - Compliant with legislations applied 1/07/05.
 - Small service boxes (pre-divided boxes of 50 and 25 weights).
 - Quantities adapted to the needs of repair workshops, avoiding overstocking.
- 5• 2004 equivalent product : ERA, ELA, ERCA.



⇒	Case	ΔΔ g
ERZ.5	50	5
ERZ.10	50	10
ERZ.15	50	15
ERZ.20	50	20
ERZ.25	50	25
ERZ.30	50	30
ERZ.35	25	35
ERZ.40	25	40

EAFPZ Plastic-coated weights for alloy rims (French : PSA, Renault)

- Plastic-coated zamak weights with integral clip, for PSA and Renault alloy rims.
- The coating (silver epoxy paint) ensures that the weights lastingly retain their untarnished appearance when mounted on varnished alloy rims.
- 2004 equivalent product : EAFP.10 15 20 25 30 35 40.



⇒	Case	ΔΔ g
EAFPZ.10	25	10
EAFPZ.15	25	15
EAFPZ.20	25	20
EAFPZ.25	25	25
EAFPZ.30	25	30
EAFPZ.35	25	35
EAFPZ.40	25	40

EADPZ Plastic-coated weights for flat alloy rims

- "Plastic-coated" zamac weights with integral clip, for flat-edged alloy rims (numerous applications on German, Italian vehicles, etc., except PSA, Renault and certain Asian manufacturers.).
- The coating (silver epoxy paint) ensures that the weights lastingly retain their untarnished appearance when mounted on varnished alloy rims.
- 2004 equivalent product : EADP.10 15 20 25 30 35 40.



⇒	Case	ΔΔ g
EADPZ.5	25	5
EADPZ.10	25	10
EADPZ.15	25	15
EADPZ.20	25	20
EADPZ.25	25	25
EADPZ.30	25	30
EADPZ.35	25	35



Self-adhesive weights for alloy rims

EGCAZ.40-25

- Zamac (zinc/aluminium alloy) weights
- Comply with the legislation applying since 1/07/05.
- Extra flat (4.2 mm) weights. For concealing the wheel balancing weights without risk of friction against the brake calliper.
- 180°C high temperature adhesive. Avoids weights debonding even under the severest conditions of use.
- Small packaging (pre-divided boxes of twenty five 40g bars, each made up of individual 5g weights). Quantities adapted to the needs of repair workshops, avoiding overstocking.
- 2004 equivalent product : EGCA.60-20.

Case	ΔΔ
	g
EGCAZ.40-25	25 100



Weights - box of 20 x 50 g bars for motorcycles

EGCM.50-20

- For motorcycle wheels.
- Aluminium-coloured plastic-coated.
- Special high-temperature resistant self-adhesive backing.

Case	ΔΔ
	g
EGCM.50-20	20 50



Wall-mounted weight storage unit

2144

- For storing 32 boxes of weights in 4 rows of 8 boxes (the complete car range occupies 2 storage units).
 - Storage units can be mounted side-by-side or one above the other..
 - Supplied with a set of fixing screws and plugs.
 - Supplied with a set of self-adhesive labels for customizing the storage unit.
 - The labels simplify identification of the different types weights.
 - Storage unit can also hold plastic boxes CKS.86 or CKS.87 (110 mm wide).
- ΔΔ : 9 kg.

Sizes	ΔΔ
	kg
2144A	99 x 51 x 12,5 cm 13



Wheel weight pliers

UA.444A

- For fitting and removing wheel-balance weights as well as opening or crimping retaining clips.
 - Sheathed and phosphate finish..
 - Length 250 mm.
- ΔΔ : 470 g.



► Steering geometry, ball joints

Camber adjuster

DLS.30

- Allows accurate camber setting on Volkswagen vehicles.
 - Ideal for use with fast wrench 40R.20.
- >> VOLKSWAGEN Golf/Vento/Passat/up to '97; Corrado/Polo/from '95; Caddy from '96; Polo Classic from '96.
- Length 145 to 210 mm.
- ΔΔ : 630 g.



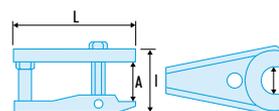
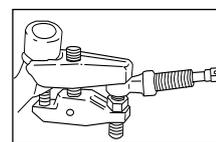
Wheels - hub - transmission

U.16 Ball-joint separators

- For removing steering and suspension ball-joints.
- Supplied with 2 spare shear pins.

➤	Ø mm	A mm	L mm	I mm	ΔΔ kg
U.16A18	16	45	100	50	0,635
U.16B	22	45	100	56	0,665
U.16B32	32	80	158	75	2,452
U.16A45	45	80	158	90	2,543

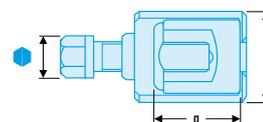
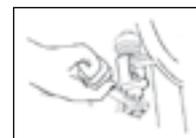
➤	Description
U.16-05J3	Set of 3 pins
U.16A45-05J3	Set of 3 shear pins (for U.16A32 and U.16-45)



U.17 ball-joint separators

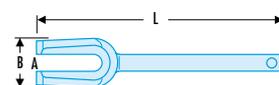
- For splitting steering ball-joints.
- Burnished and chrome finish.

➤	Capacity Ø mm	Ø mm	a mm	b mm	ΔΔ g
U.17-16	16-18	19	40	40	410
U.17-20	20-22	19	40	40	425



D.98 Fork separators

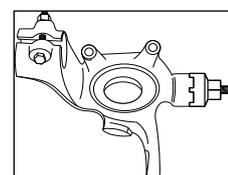
➤	A mm	B mm	L mm	ΔΔ kg
D.98A18	18	65	315	1,1
D.98A22	22	65	315	1,1



Lower ball-joint socket

D.138

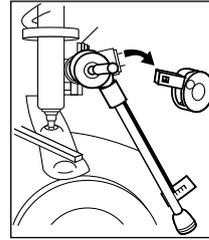
- Shaped for castellated nuts.
- 32 mm hexagon drive.
- Torque to 250 N.m.
- >> CITROËN BX/Xsara/XM/Xantia.
- >> PEUGEOT 306/309/405/406.
- Ø 52 x 48 mm.
- ΔΔ : 230 g.



Track-rod end release tools

- Square drive : \square 3/8".

	Inside \varnothing mm	\varnothing mm	$\Delta\Delta$ g
T.275A	41	75 x 135 x 25	590
T.276A	36	70 x 130 x 25	565

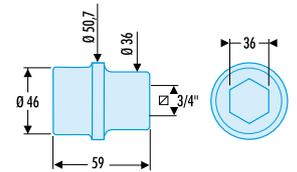


► Hub

Hub-nut protractor socket

D.143A

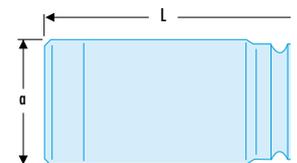
- Drive : \square 3/4".
- 36 mm six-point.
- $\Delta\Delta$: 415 g.



36 mm 6-point hub-nut socket

NK.143

- For removing hub nuts.
- Long-reach thin-wall impact socket.
- >> FIAT Lancia, ALFA ROMEO.
- Length : 100 mm.
- Square drive : \square 3/4".
- Diameter : 46.8 mm.
- $\Delta\Delta$: 680 g.



► Transmission

Driveshaft tie pliers

DM.14

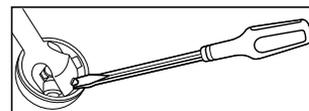
- For crimping driveshaft bellows ties.
- Suitable for Oetiker fittings
- Dimensions : 280 x 50 x 20 mm.
- ΔΔ : 475 g.



Fitting tool

T.84

- For fitting driveshaft spiders.
- >> RENAULT R19/R21/R25. VOLVO 460
- Length 315 mm.
- ΔΔ : 235 g.



Metal tie kit

DM.39A

- Comprising :
 - DM.39A1 Tie pliers.
 - DM.39A2 Dispenser.
 - DM.39A3 Strip.
 - DM.39A4 Bucklebag.
- Supplied in a plastic case 265 x 225 x 50 mm.
- ΔΔ : 1.2 kg.



Code	Description
DM.39A3	Strip
DM.39-3-10	Roll of stainless steel
DM.39A4	Bucklebag.
DM.39-4-10	Pack of 100 fasteners

Tie pliers

DM.39A1

- Pliers for cutting and stretching the strip.
- Forms part of the metal tie set DM.39A.



► Stripping



240 Special bodywork tools



TIME-SAVING TOOLS AT EVERY STAGE

Stripping, cutting, forming, assembling, painting, windshields, pneumatics.

In order to improve your everyday working life, Facom offers customised solutions for :

- Saving time.
- Optimising storage.

You choose the solution that best meets your needs :

- Package of 6 product references including our panel-beating/body repair workstation with a selection of 92 standard tools (wrenches, sockets, rules, hammers, etc.) and special bodywork tools (dressers, dollies, spoons, lock-grip pliers, etc.), together with the necessary trays for optimising storage and improving your everyday working life.

CR.T4 • Panel beating- body repair workstation.
(see page 803 for details).



CR.CM92 • 92-piece bodywork tool set.
(see next page for details)



- PL.330** Plier tray
- PL.333** Hammer tool tray
- PL.396** Forming tool tray
- PL.630** Milled file tray.

4 x



• Each of the above 6 references can be ordered separately.

►► Supports



Component storage stand



REDUCE OPERATOR MOVEMENTS,

INVESTMENT RECOVERED IN 3 MONTHS,

OPTIMISE YOUR STORAGE.

- For storing bonnets, tailgates, wheels exhaust systems, etc.
- Easy to manoeuvre (4 castor wheels).
- Compact design.
- Guarantees efficient organisation.
- Avoids lost parts, saves time.



Bodywork component storage stand

CR.S1

- Maximum supported weight 150 kg.
 - Incorporates anti-slide stops & gravity stabilizer
 - Dimensions : 90 x 60 x 190 cm.
 - 3 year guarantee.
- ΔΔ : 41 kg.



Mechanical component storage stand

CR.S11

- 4 castor wheels for easy manoeuvring around the vehicle.
 - Storage of removed components on 4 levels for easy identification of the order of reassembly.
 - 2 fluid storage containers (water, oil) for a clean workshop.
 - 2 plastic bins for fasteners.
 - Dimensions : 1,650 x 900 x 605 mm.
- ΔΔ : 40 kg.



CR.55

DOR INSTALLATION AND REMOVAL

Saloons, light commercial vehicles and 4x4s

- 1 operator
- Reduced effort
- Maximum accuracy



VERSATILE

- Suitable for positioning any type of door.
- Work with or without glazing.
- Fully adjustable.

PRECISE

- Progressive electric motor control providing millimetre precision.
- 4 castor wheels, 2 with brakes for total manoeuvrability.

PRACTICAL

- Motor fitted with a remote control, allowing the door to be guided while raising or lowering the support.
- Compact design for easy storage.
- Foam-covered supports to protect paintwork.
- Easy access to fuse for added safety.
- Supports 150 kg.

EASY, PRECISE OPERATION



INFORMATION

Door installation and removal sometimes involves carrying heavy loads. The electric stand avoids this and allows you to comply with labour legislation that advocates the reduction of physical effort, especially that liable to cause back injury. The electric stand will help improve working conditions in your workshop while enabling one person to work on the doors on their own.

Electric door removal and installation stand

CR.55

- Maximum supported weight by CR.55 : 150 kg.
 - Works with or without glazing.
 - Suitable for saloons, light commercial vehicles and 4x4 (using CR.S5UTL).
 - Millimetre precision.
 - Safety features : easy-to-reach fuses, 2 wheels with brakes, no risk of scratching (protective foam).
 - The stand takes the load for the worker.
 - Small footprint.
 - 220 V mains powered electric motor with easy-to-reach fuse.
 - Dimensions : 52 x 90 x 120.5 cm.
 - 3 year guarantee.
- ΔΔ : 27 kg.



	Description
CR.S5UTL	Accessory for sliding side doors

Heavy-duty support stand for engines, gearboxes, etc.

CR.S6

- Modular support : numerous applications in bodywork and mechanical workshops.
- Raised stand (CR.S9) transforms support into a waist-height work table
- 4 castor wheels for easy manoeuvrability.
- Allows high pressure jetting before reassembly.
- Compact design.
- Sliding, removable containers allow recovery of liquids.
- 3 year guarantee.
- Supports 450 kg.



Raised stand for CR.S6

CR.S9

- Modular support : numerous applications in bodywork and mechanical workshops.
- Raised stand transforms support (CR.S6) into a waist-height work table
- Allows high pressure jetting before reassembly.
- Compact design.
- 3 year guarantee.
- Supports 450 kg.



Support for moving vehicles with no steering gear

CR.S8

- Maximum supported weight by CR.S8 : 450 kg.
- Easy to install, ready to use.
- Width adjustment (110 to 160) to suit vehicle.
- Axle supported on a rubber-coated pivoting saddle.
- Easy to move (4 castor wheels, good load distribution).
- Compact design.
- Dimensions : (110 to 160) x 50 x 30 cm.
- 3 year guarantee.

ΔΔ : 21 kg.



Mobile support

CR.S12

- or supporting 1/2 front or rear axles having suffered a locked wheel or a flat tyre.
- The 4 castor wheels allow the vehicle to be easily moved.
- Maximum load : 600 kg.
- Dimensions : 580 x 370 x 170 mm.

ΔΔ : 2 kg.



▶▶ Stripping tools

Trim clip removal pliers

CR.D1

- For quickly removing staples, clips, door panels, facia and trim supports etc. without damage.
- Wide nose for undoing facings without risk of breaking or tearing panels.
- Finger guard to avoid injury.
- Designed for accessing difficult-to-reach places.
- Black head, chrome pliers.
- Length : 240 mm.
- ΔΔ : 190 g.



Trim removal tool

D.115A

- For removing interior door trimmings without damage.
- Dimensions : 155 x 32 x 45 mm.
- ΔΔ : 106 g.



Fastener removal tool

D.137

- For removing plastic fasteners securing carpets, trim and panels.
- Filter diameter :
- Ø head : 9 to 22 mm.
- Ø body : 4 to 9 mm.
- Dimensions : 200 x 28 x 40 mm.
- ΔΔ : 110 g.



D.29 Wrenches for difficult access

- Double angled and curved wrenches for improved manoeuvrability on boot, door or bonnet hinges.
- Compact design allows access where conventional bits and wrenches are unsuitable.



➤		L mm	ΔΔ g
D.29X40	Torx®	283	300
D.29X45	Torx®	283	300
D.29V10	XZN	283	300
D.29H8	⊕	283	300
D.29-10	⊕	280	165
D.29-12	⊕	280	165
D.29-13	⊕	280	165
D.29-16	⊕	280	165

Set of 1/4" and 1/2" drive sockets and Torx® driver bits

RSX.19A

- Comprising :
Plastic case.
- BP.102 : 204 x 122 x 52 mm.
- Tray PL.393A.
- ΔΔ : 620 g.



New

Plastic component removal tool kit

CR.D5

- Set of 5 tools for removing or unclipping plastic components (dashboard, door, boot, external trim, snap rings, etc.).
- Supplied in blister pack.
- ΔΔ : 275 g.



▶▶ Power tools

Heat gun

E.2005

- Electronic temperature control 60 to 600°C.
- Force : 2000 W.
- Air supply : power supply.
- Air flow rate (2 speeds) : 300 and 500 l/min.
- VDE approved.
- Supplied with 2 nozzles : E.2002B1 and E.2002B3.
- Ø 72 x 80 x 330 mm.
- E.2002B1 : Distribution nozzle
(ΔΔ 58 g, 75 mm (L) x 75 mm (h) x 33.7 mm (Ø)).
- E.2002B2 : Cross-flow nozzle
(ΔΔ 56 g, 75 mm (L) x 80 mm (h) x 33.7 mm (Ø)).
- E.2002B3 : Reflector nozzle
(ΔΔ 32 g, 33 mm (L) x 60 mm (h) x 33.7 mm (Ø)).
- E.2002B4 : Concentrator nozzle
(ΔΔ 30 g, 20 mm (Ø) x 52 mm (h) x 33.7 mm (Ø)).
- ΔΔ : 770 g.



▶ Cutting - drilling

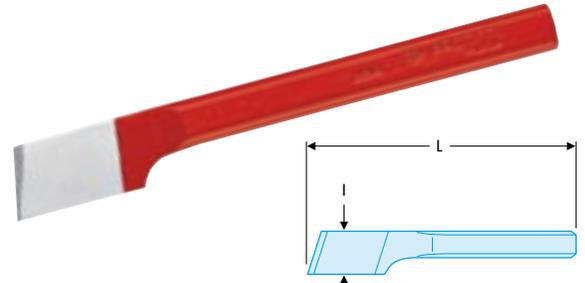
▶▶ Chisels

Side and end-cutting chisel - 200 mm long

258

- Paint finish
- Head treated against mushrooming.
- Regrindable tip.
- Forged in chrome-vanadium steels, tip hardened to 57 HRc.

	I mm	L mm	ΔΔ g
258	25	200	220

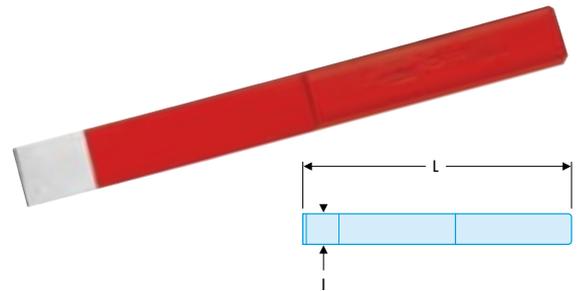


Slim-profile chisel - 235 mm long

259

- Paint finish
- Forged in chrome-vanadium steels, tip hardened to 57 HRc.

	I mm	L mm	ΔΔ g
259	26	235	240

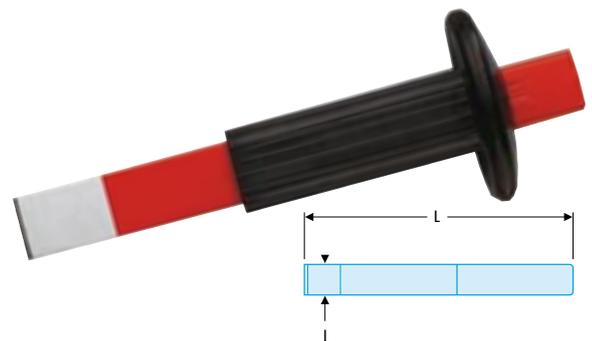


Slim-profile chisel with guard

259.P

- Forged in chrome-vanadium steels, tip hardened to 57 HRc.
- Ø Guard 85 mm.
- Paint finish

	I mm	L mm	ΔΔ g
259.P	26	235	350

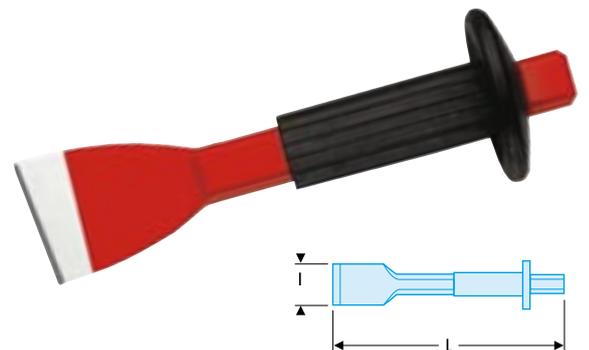


Wide chisel with guard - 250 mm long

260.P

- Paint finish
- Head treated against mushrooming.
- Regrindable tip.
- Forged in chrome-vanadium steels, tip hardened to 57 HRc.
- Ø Guard : 85 mm.

	I mm	L mm	ΔΔ g
260.P	60	250	630

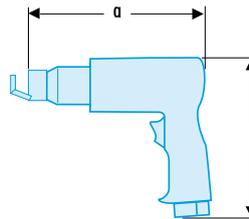


▶▶ Power chisels

Power chisel with hexagonal shank

V.320FH

- Built-in power regulator.
- Impact rate 3,000/min.
- Working pressure : 6.2 bars.
- Average air consumption : 280 l/min.
- Air inlet thread : 1/4".
- Power : 0.8 kW.
- Piston stroke : 67 mm.



	a mm	b mm	$\Delta\Delta$ kg
V.320FH	171	160	1,58
Description			
V.320HA1	Straight chisel		
V.320HA2	Punch (hexagonal shank)		
V.320HA3	Weld point cutter (hexagonal shank)		
V.320HA4	Sheet metal cutter (hexagonal shank)		
V.320HA5	Double edge sheet-metal cutter (hexagonal shank)		
V.320RRN1	Spring		

Set containing power chisel V.320FH

V.321AH

- Comprising :
 - 1 Sheet-metal cutter.
 - 1 double edge sheet-metal cutter.
 - 1 pipe cutter.
 - 1 weld point cutter.
 - 1 straight chisel.
 - 1 punch.
 - 1 ribbed air hose connector 1/4".



▶▶ Sabre saws

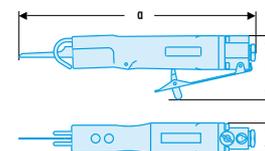
Sabre saw

V.770F

- Seamless straight and curved cutting.
- Suitable for flat and convex surfaces.
- Adjustable blade guide.
- Supplied with 3 x 10 teeth/cm blades and 3 x 12 teeth/cm blades.
- Strokes per minute : 10,000.
- Average air consumption 220 l/min.
- Air inlet thread : 1/4".
- \varnothing int. air hose : 10 mm.



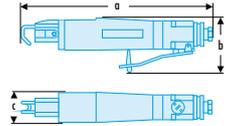
	a mm	b mm	c mm	$\Delta\Delta$ kg
V.770F	229	75	36	0,7
Description				
V.770A1	Jeu de 6 lames à denture fine (12 dents/cm)			
V.770A2	Jeu de 6 lames à denture standard (10 dents/cm)			



Super-duty sabre saw

V.775F

- Suitable for intensive use.
- Anti-vibration rubber handle.
- Air exhaust in handle.
- Supplied with 3 x 10 teeth/cm blades and 3 x 12 teeth/cm blades.
- Strokes per minute : 5,750.
- Average air consumption : 720 l/min.
- Air inlet thread : 1/4".
- Ø int. air hose : 10 mm.



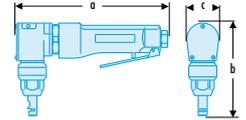
Icon	Description
V.770A1	Set of 6 blades - fine (12 teeth/cm)
V.770A2	Set of 6 blades - standard (10 teeth/cm)

▶▶ Nibbler

Nibbler

V.850F

- Lever throttle for precise control and low-speed start.
- Can produce rounded edges up to 6.5 mm radius.
- Max. thickness 1.2 mm - speed 1.8 m/min.
- Strokes per minute : 4,300.
- Average air consumption : 110 l/min.
- Air inlet thread : 1/4".
- Ø int. air hose : 10 mm.



Icon	a	b	c	ΔΔ
	mm	mm	mm	kg
V.850F	179	118	40,5	0,9

Icon	Description
V.850KR2	Kit

▶▶ Milling and cutting tools

End mills

- Self-centring, non-slip.
- Can be reground.
- Available in sets of 2 same Ø (J2) or 3 drills of different Ø (J3).

Icon	Ø	Icon	L	ΔΔ
	mm		mm	g
225.6J2	6	2	66	36
225.8J2	8	2	77	50
225.10J2	10	2	88	90
225.J3	6-8-10	3		90



Three-square scraper

231

- High quality steel blade, polished chrome finish.
 - Varnished wood handle.
 - Shank length : 200 mm.
- ΔΔ : 180 g.

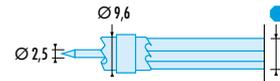


►► Air tools

Spot weld cutter

230

- Fitted to a drill, this tool is used for separating spot-welded panels.
- Comprises bit holder, reversible mill and pilot tip.
- Not compatible with V.781B.
- Length : 70 mm.
- ΔΔ : 23 g.



⚙️	Description	ΔΔ g
230.A1J5	Set of 5 spare mills	30

Set of mills

230.J1

- Comprising 1 kit 230, 2 pilot tips and 10 reversible mills..
- Dimensions : 115 x 65 x 22 mm.
- ΔΔ : 90 g.

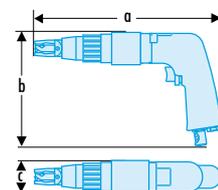


⚙️	Description	ΔΔ g
230.A1J5	Set of 5 spare mills	30

Spot weld remover

V.781

- Air connection (female thread) : 1/4".
- Recommended air hose (Ø int.) : 8 mm.
- Recommended fitting (thread - Ø int.) : 1/4"-6.
- Pressure : 6.3 bar.
- Speed of rotation : 1,800 rpm.
- Average air consumption : 460 l/min.
- Noise level (dB(A)) : 74.1.
- Vibration level : < 2.5m/s².
- Milling cutter diameter : 8 mm.
- For accurate removal of spot welds.
- Caution : not to be used with a stop.
- Avoids damage to the second layer of metal.
- Also takes 8.2 mm milling cutters.
- Supplied with 1 x 8 mm milling cutter.
- Each milling reference corresponds to a single milling cutter.
- Minimum order per reference = 5.



⚙️	a mm	b mm	c mm	ΔΔ kg
V.781	242	160	46	1,35
⚙️	Description			
V.781A1	Milling cutter Ø 8 mm			

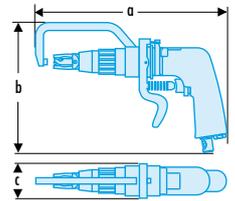


Spot weld remover with stop

V.781B

- Air connection (female thread) : 1/4".
- Recommended air hose (Ø int.) : 8 mm.
- Recommended fitting (thread - Ø int.) : 1/4"-6.
- Pressure : 6.3 bar.
- Speed of rotation : 1,800 rpm.
- Average air consumption : 460 l/min.
- Noise level (dB(A)) : 74; 1.
- Vibration level : < 2.5 m/s².
- Milling cutter diameter : 8 mm.
- For accurate removal of spot welds.
- Fitted with a stop to hold the workpiece in position without slipping.
- Also takes 8.2 mm milling cutters.
- Supplied with 1 milling cutter. Ø 8 mm.
- Each milling reference corresponds to a single milling cutter.
- Minimum order per reference = 5.

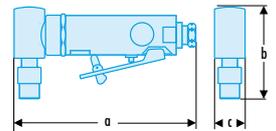
	a	b	c	ΔΔ
	mm	mm	mm	kg
V.781B	270	198	53	1,6
	Description			
V.781A1	Milling cutter Ø 8 mm			



Angle grinder - 6 mm collet

V.252

- Angle grinder for grinding wheels with shank.
- For cutting and cleaning.
- Compact motor with sturdy blades.
- Compact angled head for difficult-to-reach places.
- Exhaust air duct with integral air supply pipe.
- Supplied with 6 mm collet and 2 open-end wrenches.
- Air connection (female thread) : 1/4".
- Recommended air hose (Ø int.) : 8 mm.
- Recommended fitting (thread - Ø int.) : 1/4"-6.
- Pressure : 6.3 bar.
- Speed of rotation : 18,000 rpm.
- Average air consumption : 300 l/min.
- Noise level (dB(A)) : 83.
- Vibration level : < 2.5 m/s².
- Collet : 6 mm.



	a	b	c	ΔΔ
	mm	mm	mm	g
V.347	158	78	27	400

Miscellaneous

Steel wire brush

270A.MA

- 280 x 34 x 60 mm.
- ΔΔ : 150 g.



"Standard" kit

245.J1

- For making round gaskets.
- Cutting capacity : Ø 3 to 30 mm using a punch and Ø 56 to 330 mm using calipers.
- Supplied in a plastic case BP.115 and tray PL.100A.
- Dimensions 332 x 143 x 67 mm.
- ΔΔ : 1.8 kg.



▶ Forming



Bodywork repair workstation

EFFICIENT, MORE COMFORTABLE STORAGE

Designed to keep everything close to hand, save time and avoid losing tools.

GALVANIZED STEEL WORKTOP

- Easy to maintain.
- High strength.



SAFETY

- Central key locking.
- Drawer fronts fitted with a catch to prevent accidental opening.

CORNER BUMPERS

- To avoid damage to vehicles in case of accidental contact

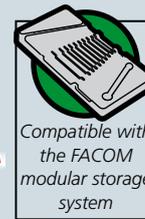
MANOEUVRABILITY

- 4 large diameter wheels :
2 fixed and 2 castors,
1 with brake.



MAXIMUM STORAGE

- Panel with special system for securing hammers and dressers.
- Other tools can be freely hung using the CKS system.
- 2 pull-out trays giving access to a "bin" for storing heavy tools, such as dollies and spoons, etc. Trays and bin fitted with a non-slipmat.
- 3 drawers :
(2 x 60 mm + 1 x 130 mm) and bin for storing bulky items and pneumatic tools.



Compatible with the FACOM modular storage system

COMFORT

- Working height
- Ergonomic handle.
- Lid fitted with gas springs.

Supplied without tools and consumables

Bodywork repair workstation

CR.T1PB

Comprising :

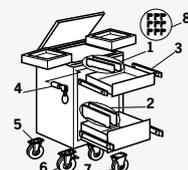
- A lid :
- containing a panel fitted with a system for securing dressers and hammers.
- PK perforations for freely hanging other tools.
- 2 gas springs for comfort of use.
- 2 trays that pull out sideways to reveal a large bin for storing heavier tools such as dollies and spoons. The bottom of the trays and the bin are fitted with non-slip mats.
- 3 drawers (2 x 60 mm + 1 x 130 mm) compatible with the Facom modular storage system and 1 bin drawer (270 mm high) for storing bulky items and pneumatic tools.
- High resistance, easy-to-maintain galvanized steel worktop.
- Safe : Central key locking of lid and drawers.
- Corner bumpers to avoid damage to vehicles in case of accidental contact.
- Manoeuvrability ensured by 4 large diameter wheels, 2 fixed, 2 castors, one with a brake.
- Dimensions : 1,020 x 770 x 460 mm.

ΔΔ : 76.5 kg.



CR.T4

1	2840.15	5	2092.09
2	2840.16	6	2092.10
3	2840.13	7	2092.11
4	2840.17	8	CRT4.04



92-piece bodywork tool set

CR.CM92

- Details below.

Ref	Qty	Description
40.JE9T	9	Roll-set of combination wrenches 8 to 19 mm N.98A-2
RS.430E	27	Socket set 1/4" and 1/2" and accessories (in a case)
AMZ.M1	1	Short bit holder
BP.102	1	Plastic case
ED.T	3	Pozidriv® bits 101-102-103
EH	4	Male bits 103 - 104 - 105 - 106
EP.T	3	Phillips® bits 101 - 102 - 103
ES.T	3	Slotted head screw bits 134.5 - 136.5 - 148
EXR	6	Resistor® 1/4" bits 110 to 140
PL.400A	1	Combination tray E.105APB
180.25CPE	1	Lockable multigrip pliers
192.16CPE	1	"Piano wire" diagonal cutters
185.20CPE	1	Sheathed straight half-round nose pliers
501	1	Long-nose lock-grip pliers
893.316	1	Locking 3 m tape rule
234	1	Scriber
601	1	Hacksaw frame
660A.10	10	Bimetal hacksaw blades
882A	1	Scroll shears
RD.MD200EM	1	Round second-cut file 200 mm
DRD.MD200EM	1	Half-round second-cut file 200 mm
200A.50	1	Riveting hammer

Ref	Qty	Description
208A.32CB	1	Plastic-tip mallet
249.2	1	Drift punch 2 mm
249.4	1	Drift punch 4 mm
256.6	1	Precision centre punch
259.P	1	Slim-profile chisel
861D.RPC	1	Round, flat and convex head hammer
871B.45	1	Slim wedge dolly
861D.30	1	Bumping hammer
866D.32	1	Shrinking hammer
868D.40BOC	1	Curved peen hammer
862D.60	1	Flat dresser
870B	1	Regular dolly
906A	1	Pinch wedge dolly
875.3	1	Long single spoon
895A	1	Short single spoon
518.3	1	Lock-grip pliers
518.4	1	Lock-grip pliers
225.J3	3	End mills
851B	1	Frame for milled files
850.S350	1	Standard file
CR.D10	1	Windshield wiper arm remover
CR.D1	1	Trim clip removal pliers

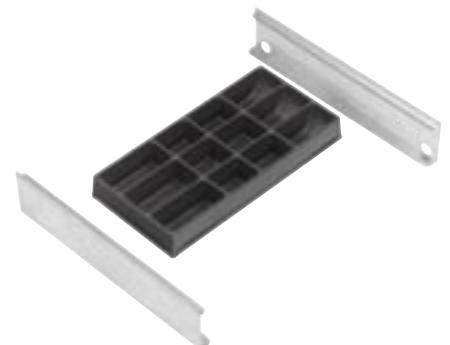


Drawer kit

CR.A1

- Organization kit for drawers min 130 mm high.
- For storing clips, staples and rivets.
- Includes fixings.
- For workstations CR.T2, CR.T3, CR.T4.

ΔΔ : 250 g.



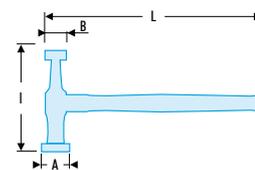
▶▶ Panel beating hammers

861D Bumping hammers

- Stretching and planishing hammer.
- Convex, round and square heads.
- Secure handle attachment.
- Finely polished planishing surfaces.
- Facetted hickory handle.

➤	∅ A mm	B mm	I mm	L mm	ΔΔ g
861D.26	25	30	100	310	300
861D.30	30	35	100	310	390

➤	Description
211.MH26	Spare handle and wedge



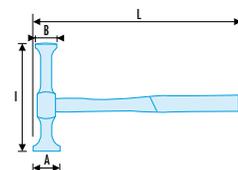
Round, flat and convex head hammer

861D.RPC

- Bumping and planishing hammer.
- Flat, round and convex heads.
- Secure handle attachment.
- Finely polished heads.
- Facetted handle.

➤	∅ A mm	B mm	I mm	L mm	ΔΔ g
861D.RPC	32	40	150	310	600

➤	Description
211.MH26	Spare handle and wedge

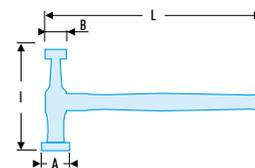


866D Shrinking hammer

- Stretching and planishing hammer.
- 1 round ribbed face, one square smooth face.
- Secure handle attachment.
- Facetted handle.

➤	∅ A mm	B mm	I mm	L mm	ΔΔ g
866D.32	30	35	100	310	310
866D.41	35	40	100	310	380

➤	Description
211.MH26	Spare handle and wedge



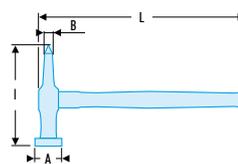
Hammer with round flat face and straight pein

868D.40PLD1

- Planishing hammer.
- 1 round flat face, 1 straight pein.
- Secure handle attachment.
- Finely polished head.
- Facetted handle.

➤	∅ A mm	B mm	I mm	L mm	ΔΔ g
868D.40PLD1	40	23	140	310	320

➤	Description
211.MH26	Spare handle and wedge



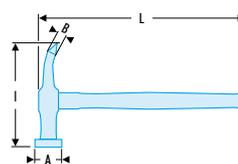
Hammer with round domed face and curved pein

868D.40BOC

- Planishing hammer.
- 1 round domed face, 1 curved pein.
- Secure handle attachment.
- Finely polished head.
- Facetted handle.

➤	∅ A mm	B mm	I mm	L mm	ΔΔ g
868D.40BOC	40	23	140	310	430

➤	Description
211.MH26	Spare handle and wedge



►► Dressers

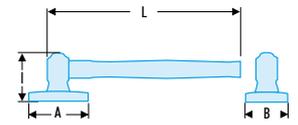
Flat dresser

862D.60

- Flat dresser.
- Secure handle attachment.
- Finely polished head.
- Facetted handle.

➤	A	B	I	L	ΔΔ
	mm	mm	mm	mm	g
862D.60	50	30	70	295	320

➤	Description
211.MH26	Spare handle and wedge



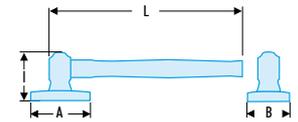
Long-dome dresser

863D.60

- Surface curved lengthwise.
- Secure handle attachment.
- Finely polished head.
- Facetted handle.

➤	A	B	I	L	ΔΔ
	mm	mm	mm	mm	g
863D.60	50	30	70	295	320

➤	Description
211.MH26	Spare handle and wedge



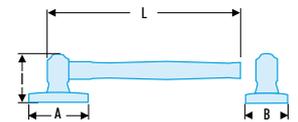
Wide-dome dresser

864D.60

- Surface curved widthwise.
- Secure handle attachment.
- Finely polished head.
- Facetted handle.

➤	A	B	I	L	ΔΔ
	mm	mm	mm	mm	g
864D.60	50	30	70	295	320

➤	Description
211.MH26	Spare handle and wedge



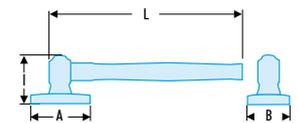
Shrinking dresser

867D

- Ribbed face.
- Secure handle attachment.
- Finely polished head.
- Facetted hickory handle.

➤	A	B	I	L	ΔΔ
	mm	mm	mm	mm	g
867D	50	30	70	295	310

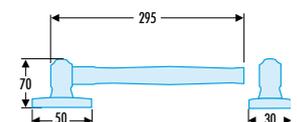
➤	Description
211.MH26	Spare handle and wedge



Shrinking dresser

867D

- Ribbed face.
- Secure handle attachment.
- Finely polished head.
- Facetted hickory handle.



►► Dollies

Regular dolly

870A

- Polished finish.
- Dimensions : 88 x 60 x 35 mm.
- ΔΔ : 1.115 kg.



Regular dolly

870B

- Combination of sharp and rounded edges.
- Special surface treatment.
- Laser marking for improved legibility.
- Also available with more rounded edges (870A).
- Dimensions : 90 x 55 x 35 mm.
- ΔΔ : 1.15 Kg.



Flat regular dolly

908A

- Comprising one flat face, one curved face and an angle.
- Special surface treatment.
- Laser marking for improved legibility.
- Dimensions : 90 x 65 x 32 mm.
- ΔΔ : 1.05 Kg.



Slim shaping dolly

909A

- Polished finish.
- Dimensions : 88 x 60 x 23 mm.
- ΔΔ : 750 g.



Slim wedge dolly

871B.45

- Curved face.
- Special surface treatment.
- Laser marking for improved legibility.
- Also available in a thicker version (871B.55).
- Dimensions : 125 x 55 x 37 mm.
- ΔΔ : 900 g.



Wedge dolly**871B.55**

- Curved face.
- Special surface treatment.
- Also available in a thinner version (871B.45).
- Dimensions : 140 x 54 x 55 mm.
- ΔΔ : 1.35 kg.

**Curved head dolly****872A**

- Double-end dolly, large model.
- Polished finish.
- Dimensions : 90 x 70 x 125 mm.
- ΔΔ : 1.3 kg.

**Dished dolly****874A**

- Curved on all sides.
- Dimensions : 106 x 65 x 26 mm.
- ΔΔ : 980 g.

**Thin toe dolly****902B**

- One curved face and one flat face.
- Polished finish.
- Dimensions : 115 x 56 x 25 mm.
- ΔΔ : 860 g.

**Toe dolly****902C**

- One curved face and one flat face.
- Special surface treatment.
- Laser marking for improved legibility.
- Dimensions : 125 x 60 x 30 mm.
- ΔΔ : 1.37 Kg.

**Pinch wedge dolly****906A**

- One flat face and one curved face.
- Special surface treatment.
- Laser marking for improved legibility.
- Dimensions : 130 x 68 x 25 mm.
- ΔΔ : 1.15 Kg.



►► Spoons and blades

Long single spoon

875.3

- Bumping spoon.
- Polished finish.
- Length : 390 mm.
- ΔΔ : 1.3 kg.



40° single spoon

875.4

- Bumping spoon.
- Polished finish.
- Length : 250 mm.
- ΔΔ : 500 g.



Angled, flat short double spoon

876A

- Double bumping spoon, very cranked at one end.
- Polished finish.
- Also available in a long version (ref : 877A, 510 mm long.).
- Length : 400 mm.
- ΔΔ : 1.7 kg.



Angled and flat double spoon

877A

- Double bumping spoon, very cranked at one end.
- Polished finish.
- Also available in a short version (ref : 876A, 400 mm long.).
- Length : 510 mm.
- ΔΔ : 2.2 kg.



Flat shrinking blade

891A.PL

- Ribbed face.
- Length : 350 mm.
- ΔΔ : 700 g.



Short single spoon

895A

- Bumping spoon.
- Varnished and polished finish.
- Length : 285 mm.
- ΔΔ : 820 g.



▶▶ Forming tool sets

Basic 5-piece forming tool set

CR.858J5

- Supplied loose, as below.

➡	Qty	Description
861D.30	1	Bumping hammer
862D.60	1	Flat dresser
870B	1	Regular dolly
906A	1	Pinch wedge dolly
871B.45	1	Slim wedge dolly



Professional 15-piece forming tool set

CR.858J15

- Supplied loose, as below.

➡	Qty	Description
868D.40BOC	1	Curved peen hammer
866D.32	1	Shrinking hammer
861D.30	1	Bumping hammer
862D.60	1	Flat dresser
870B	1	Regular dolly
906A	1	Pinch wedge dolly
871B.45	1	Slim wedge dolly
872A	1	Curved head dolly
875.3	1	Long single spoon
876A	1	Angled, flat double spoon
895A	1	Short single spoon
891A.PL	1	Flat shrinking blade
851B	1	Frame for milled files
850.S350	1	Standard file
209.50	1	Wood mallet



Specialist 20-piece forming tool set

CR.858J20

- Supplied loose, as below.

➡	Qty	Description
868D.40BOC	1	Curved peen hammer
866D.32	1	Shrinking hammer
861D.30	1	Bumping hammer
861D.RPC	1	Round, flat and convex head hammer
862D.60	1	Flat dresser
870B	1	Regular dolly
906A	1	Pinch wedge dolly
908A	1	Flat regular dolly
871B.45	1	Slim wedge dolly
872A	1	Dished dolly
874A	1	Curved head dolly
875.3	1	Long single spoon
875.4	1	40° single spoon
876A	1	Angled, flat double spoon
895A	1	Short single spoon
891A.PL	1	Flat shrinking blade
851B	1	Frame for milled files
850.S350	1	Standard file
850.F350	1	Fine file
209.50	1	Wood mallet



►► Modules

Bodywork module

MOD.CAR1

- Comprising :
 - 861D.RPC : Hammer with round, flat and convex heads.
 - 902B : Thin toe dolly.
 - 909A : Slim shaping dolly.
 - 906A : Pinch wedge dolly.
 - PL.396A : Tray.



Code	Description
211.MH26	Spare handle and wedge

Bodywork module

MOD.CAR1

- Comprising :
 - 225.J3 : Set of 3 end mills.
 - 259.P : Slim profile chisel with guard.
 - 518.4 : Lock-grip pliers.
 - 850.S350 : Standard milled file
 - 851B : Frame for milled files.
 - 862D.60 : Flat dresser.
 - 875.3 : Long single spoon.
 - 875.4 : Angled spoon.
 - 884B : Panel shears
 - 874A : Dished dolly.
 - PL.379B : Tray.



Code	Description
211.MH26	Spare handle and wedge

►► File set

Frame for milled files

851B

- Ergonomic handle with a choice of two working positions according to the task to be performed.
- Accurate setting of file profile.
- Takes both 300 and 350 mm file lengths.
- Supplied without file.
- FACOM produces 5 different milled files (cuts : standard, fine and extra-fine).
- Dimensions : 360 x 33 x 140 mm.
- ΔΔ : 630 g.



850 Milled files

- Recommended for soft metal, cast iron, mild steel and soft plastics.
- For use with frame 851B.

Code	Cut	Tooth shape	Teeth per cm	L mm	l mm	ΔΔ g
850.S300	Standard	Arc	3 1/2	300	30	190
850.S350	Standard	Arc	3 1/2	350	35	270
850.SD350	Standard	Straight	3 1/2	350	35	260
850.F350	Fine	Arc	4 1/2	350	35	270
850.EF350	Extra-fine	Arc	6	350	35	300



►► Modules

Milled file module

MOD.850

- Comprenant :
- 851B : Frame for milled files.
- 850.SD350 / S350 / F350 : Standard straight, standard arc and fine arc files.
- 229A.ST1 : Stepped bits Ø 4 to 20 mm.
- 225.8J2 : End mills Ø 8 mm.
- Tray PL.630.
- ΔΔ : 1.8 kg.



► Assembling

►► Spot welding

Spot welder

UM.300-220

- Air supply : 220 V single phase.
- Force : 11 kVA.
- Max. welding capacity : 2 x 2 mm sheets.
- Ø 18 mm electrode carrier.
- Time setting 15 sec to 1 min 25 sec.
- Electrode pressure adjustment.
- Each spot welder supplied with :
UM.300AF electrode dresser.
UM.300BA set of 2 bushes for electrode holders Ø16 mm.
82.5 hexagon key.
- Dimensions : 370 x 90 x 230 mm.
- ΔΔ : 10 kg.



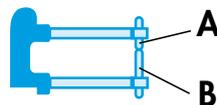
Code	Description
UM.300EL1	Electrodes

380 V single-phase spot welder

UM.300-380

- Same as UM.300-220 except with 380V power supply.

Code		Qty
UM.300EL3	A	1
UM.300EL4	B	1

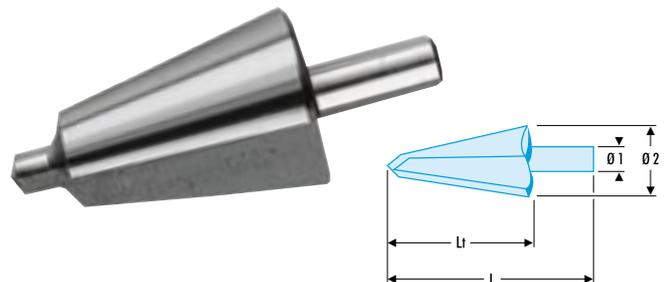


►► Drill bits

229A Reaming bits

- HSS for drilling, deburring and reaming thin sheet steel and non-ferrous metals.
- Max. recommended thickness : 4 mm.

Code	Ø 2 mini - maxi mm	Ø mm	Lt mm	L mm	ΔΔ g
229A.1	3 - 14	6	37	59	21
229A.2	5 - 20	8	41	71	45
229A.3	16 - 30,5	9	48	76	131



Set of 3 reaming bits

229A.J3

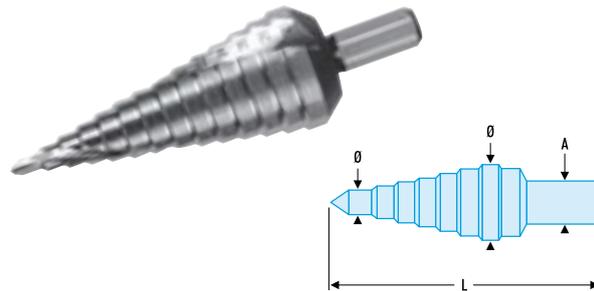
- Capacity : \varnothing 3 to 30.5 mm.
 - In a steel case : 120 x 100 x 38 mm.
 - Supplied with lubricant.
- $\Delta\Delta$: 555 g.



229A.ST Stepped bits

- For precision-drilling straight bores in all materials.
- No pilot hole required.
- Parallel shank with 3 flats for positive rotation.
- Diameter identification markings.

	\varnothing mini - maxi mm	A mm	L mm	$\Delta\Delta$ g
229A.ST0	4-5-6-7-8-9-10-11-12	6	65	25
229A.ST1	4-6-8-10-12-14-16-18-20	8	75	65
229A.ST2	4-6-9-12-15-18-21-24-27-30-33-36-39	10	107	315
229A.ST3	6-9-13-16-19-21-23-26-29-32-35-38	10	100	320



►► Pliers

Hand punch

CAD.9

- Punch : \varnothing 5 mm.
 - Max. sheet thickness : 0.8 mm.
 - Dimensions : 290 x 130 x 30 mm.
- $\Delta\Delta$: 1.17 kg.

	Description
CAD.10RN1	Punch and die, 5 mm diameter



Hand crimper and punch

CAD.10

- Crimp width : 12 mm.
 - Punch \varnothing 5 mm.
 - Swivel head.
 - Max. sheet thickness : 0.8 mm.
 - Dimensions : 290 x 130 x 30 mm.
- $\Delta\Delta$: 1.2 kg.

	Description
CAD.10RN1	Punch and die, 5 mm diameter

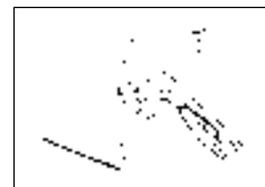
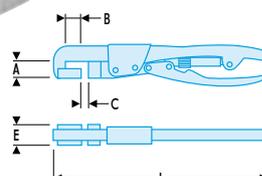


►► Lock-grip pliers

518 Bodywork lock-grip pliers

- For clamping panels when setting opening clearance or during assembly.
- Compact tools with smooth jaws.
- 518.1 : for 2 flat panels.
- 518.2 : for 2 panels with 90° edge.
- 518.3 : for 2 panels with 90° edge, allowing spot welding within jaw throat.
- 518.4 : for 2 flat panels, allowing spot welding within jaw throat.

	C mm	A mm	B mm	E mm	L mm	$\Delta\Delta$ g
518.1	18	14	-	13	205	330
518.2	10	14	14	13	205	330
518.3	20	15	48	50	240	420
518.4	20	45	-	50	215	400



► Painting preparation



SURFACE PREPARATION WORKSTATION

EFFICIENT, MORE ORGANISED STORAGE

• Specially designed to enable the user to perform surface preparation tasks in a minimum of time with a maximum of organisation.

• A clever storage system for keeping all the tools and consumables required for each job close to hand.

• Every day, you will appreciate the comfort, safety and organisation provided by its various features.

• Particularly appreciated for ISO 9000 certifications



Supplied without tools and consumables

EASY TO MAINTAIN

• Galvanized steel worktop, resistant to chemical agents, solvents, etc. Removable lip.

EVERYTHING CLOSE TO HAND

• Bottle-shelf, paper-roll holder, waste bin, shelf for abrasives, adhesive rolls, etc: keeps everything within easy reach, at all times !

CORNER BUMPERS

• To avoid damage to vehicles in case of accidental contact !

CLASP PADLOCK



►► Workstations

Surface preparation workstation

CR.T3

- 2 sloping upper shelves for storing consumables.
- 1 drawer 130 mm high with padlock for expensive items, safety items, etc.
- 2-way sloping shelf for ordinary tools.
- 1 storage area for bulky consumables.
- Perforated recessed side panels for attaching accessories : 2 bottle-shelves, 1 paper-roll holder, wire supports to hold paint guns, 1 waste bag holder.
- Dimensions 1,585 x 1,020 x 610 mm.
- ΔΔ : 52 kg.



CR.T3			
Ø	→	○	→
1	2825.08	4	2840.13
2	2825.09	5	2840.16
3	2600.19		

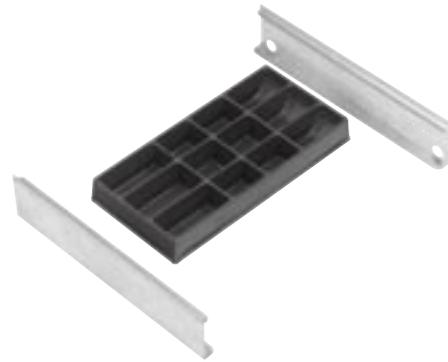


Drawer kit

CR.A1

- Organization kit for drawers min 130 mm high.
- For storing clips, staples and rivets.
- Includes fixings.
- For workstations CR.T2, CR.T3, CR.T4.

ΔΔ : 250 g.



▶▶ Supports

Paper dispenser stand

CR.P6

- Strips of masking paper up to 1.20 m long within easy reach.
- Sheets can be torn off with one hand, avoiding the need for an assistant.
- Sheets easily cut to the required length.
- Easy to manoeuvre around the workshop
- Dimensions : 1,380 x 1,370 x 500 mm.

ΔΔ : 18 kg.



Multi-functional bodywork support cradle

CR.S7

- Maximum supported weight by CR.S7 : 80 kg.
- Waist-height support.
- Ergonomic design, flexible fabric sling moulds to the shape of the panel supported.
- Easy to move (4 castor wheels, good load distribution).
- Easy to move (2 castors with brake).
- 2 foam protections to prevent scratches (accessory CR.S7PRO).
- Compact design.
- Easy to store.
- Dimensions : 90 x 82 x 93 cm.
- 3 year guarantee.

ΔΔ : 6.5 kg.



	Description
CR.S7PRO	Foam protection
CR.S7-05	Set of 2 slings

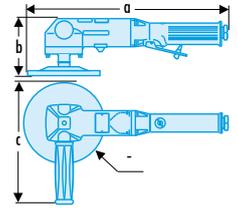


▶▶ Air tools

Angle sander Ø 178 mm

V.252

- Surface roughing and cleaning.
- Designed for use with 178 mm dia. fibre disc.
- Powerful, 4-blade motor.
- Supplied with handle and one 178 mm dia. fibre pad.
- Air connection (female thread) : 1/4".
- Recommended air hose (Ø int.) : 8 mm.
- Recommended fitting (thread - Ø int.) : 1/4"-6.
- Pressure : 6.3 bar.
- Speed of rotation : 4,500 rpm.
- Average air consumption : 490 l/min.
- Noise level (dB(A)) : 86.9.
- Vibration level : < 2.5 m/s².
- Pad size : 178 mm.



➤	a	b	c	Ø	ΔΔ
	mm	mm	mm	mm	kg
V.411	320	103	235	175	1,8
➤	Description				
V.411A1	178 mm dia. pad				

V.252F

Orbital sander Ø 152 mm - 5 mm orbit

POWER WITHOUT WEIGHT

The V.252 pneumatic sander is ideal for preparing surfaces for painting. The free speed of 12,000 rpm is perfect for obtaining a finely sanded treated surface. The speed control lever can be operated without setting down the tool.



- Advantages :**
- Featherweight
 - Low noise
 - Comfortable and easy to handle

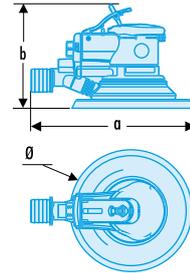
With its compact design, this sander can be held in one hand. Its lightweight material reduces the transmission of cold in winter and provides a good feel while considerably reducing vibration.



Orbital sander 152 mm - 5 mm orbit

V.252F

- Can connect to a central exhaust unit.
- Speed of rotation : 10,000 rpm.
- Air inlet thread : 1/4".
- Working pressure : 6.2 bars.
- Pad diameter 152 mm.
- Supplied with a 6-hole Velcro pad.
- Orbit 5 mm.
- Average air consumption : 104 l/min.
- Rotation speed control system.

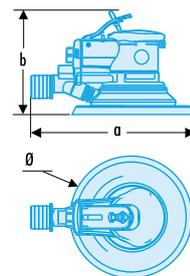


	a mm	b mm	Ø mm	ΔΔ kg
V.252F	225	115	152	0,74
	Description			
V.252F1	6 hole Velcro pad			

One-handed orbital sander Ø 150 mm - 2.5 mm orbit

V.252

- Ultra-light one-handed sander, special high finish.
- Supplied with 6-hole Ø 150 mm.
- Powerful torque, comfortable thermal and vibration-insulated body.
- Compatible with all Ø 29 mm.
- Dust-proof double bearing.
- Speed can be varied during sanding using handle-mounted control.
- Air connection (female thread) 1/4".
- Recommended air hose (Ø int.) : 8 mm.
- Recommended fitting (thread - Ø int.) : 1/4"-6.
- Pressure : 6.3 bars.
- Speed of rotation : 10,000 rpm.
- Average air consumption : 380 l/min.
- Noise level : 77,8.
- Vibration level : < 2.5 m/s².
- Ø Tray : 150 mm.
- Eccentric offset : 2.5 mm.



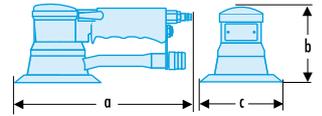
	a mm	b mm	Ø mm	ΔΔ kg
V.256	205	125	150	0,87
	Description			
V.256A1	6 hole Velcro pad Ø 150 mm.			



Two-handed orbital sander Ø150 mm - 8 mm orbit

V.252

- Easy to handle, lightweight roughing sander.
- Supplied with 6-hole Ø 150 mm.
- Double bearing, comfortable thermal and vibration-insulated body.
- Compatible with all Ø 29 mm.
- Variable speed control from 5,000 to 10,000 rpm.
- Air connection (female thread) 1/4".
- Recommended air hose (Ø int.) : 8.
- Recommended fitting (thread - Ø int.) : 1/4"-6.
- Pressure : 6.3 bar.
- Speed of rotation : 10,000 rpm.
- Average air consumption : 340 l/min.
- Noise level (dB(A)) : 76.1.
- Vibration level : 3 m/s².
- Ø Tray : 150 mm.
- Eccentric offset : 8 mm.

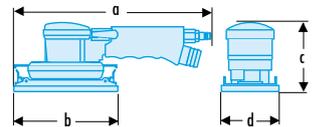


	a	b	c	ΔΔ
	mm	mm	mm	kg
V.258	305	140	150	1,5
	Description			
V.258A1	6 hole Velcro pad Ø 150 mm			

Vibrating sander - 95 x 170 mm - 8 holes

V.252

- Easy to handle, lightweight roughing sander.
- Supplied with pad and 8-hole abrasive perforator.
- High-quality chrome-plated aluminium motor, comfortable thermally-insulated body.
- Clips for standard abrasives.
- Compatible with all Ø 29 mm.
- Variable speed control from 5,000 to 10,000 rpm.
- Air connection (female thread) : 1/4".
- Recommended air hose (Ø int.) : 8 mm.
- Recommended fitting (thread - Ø int.) : 1/4"-6.
- Pressure : 6.3 bars.
- Speed of rotation : 10,000 rpm.
- Average air consumption : 360 l/min.
- Noise level : 74.
- Vibration level : 5.4 m/s².
- Eccentric offset : 5 mm.



	a	b	c	d	ΔΔ
	mm	mm	mm	mm	kg
V.260	320	170	120	95	1,7
	Description				
V.260A1	8 hole plate				
V.260SAV50B	95 x 170 mm pad				

Belt sander - 10 x 330 mm

V.252

- Surface roughing and cleaning.
- Multi-position adjustable handle.
- Quick-change belt system.
- Supplied with 3 belts (one ready-mounted) : 2 x 120 grit, 1 x 80 grit.
- Air connection (female thread) : 1/4".
- Recommended air hose (Ø int.) : 8 mm.
- Recommended fitting (thread - Ø int.) : 1/4"-6.
- Pressure : 6.3 bars.
- Speed of rotation : 15,000 rpm.
- Average air consumption : 400 l/min.
- Noise level : 79,4.
- Vibration level : < 2.5 m/s².
- Belt size : 10 x 330 mm.
- Each belt reference corresponds to a single belt.
- Minimum order = 10 belts.



	a mm	b mm	ΔΔ g
V.402	284	76	800
	Description		
V.402A1	80 grit belt 10 x 330		
V.402A2	120 grit belt 10 x 330		

High capacity belt sander - 20 x 520 mm

V.252

- Surface roughing and cleaning.
- Multi-position adjustable handle.
- Quick-change belt system.
- Supplied with 2 belts (one ready-mounted) : 1 x 120 grit, 1 x 80 grit.
- Air connection (female thread) : 1/4".
- Recommended air hose (Ø int.) : 8 mm.
- Recommended fitting (thread - Ø int.) : 1/4"-6.
- Pressure : 6,3 bar.
- Speed of rotation : 17,000 rpm.
- Average air consumption : 400 l/min.
- Noise level : 78.
- Vibration level : < 2.5 m/s².
- Belt size : 20 x 520 mm.
- Each belt reference corresponds to a single belt.
- Minimum order = 10 belts.



	a mm	b mm	ΔΔ kg
V.403	353	89	1,15
	Description		
V.403A1	80 grit belt 20 x 520		
V.403A2	120 grit belt 20 x 520		



► Painting



Component storage stand



**REDUCE OPERATOR MOVEMENTS,
INVESTMENT RECOVERED IN 3 MONTHS,
OPTIMISE YOUR STORAGE.**

- For storing bonnets, tailgates, wheels exhaust systems, etc.
- Easy to manoeuvre (4 castor wheels).
- Compact design.
- Guarantees efficient organisation.
- Avoids lost parts, saves time.



►► Supports

Painting stand

CR.P1

- Maximum supported weight by CR.P1 : 50 kg.
- Easy to use.
- Modularity : 16 adjustment points, height adjustment, 360° angular adjustment with locking system.
- Sturdy frame.
- 2 large wheels for easy manoeuvrability.
- Compact design.
- Dimensions : 130 x 120 x 70 cm.
- 3 year guarantee.
- ΔΔ : 19 kg.



Bodywork support stand

CR.P2

- Working height : min. 800 mm, max. 1,100 mm.
- Maximum supported weight : 80 kg.
- Easy to use.
- Height adjustment.
- Sturdy frame, stable base.
- Small footprint, stores easily.
- 3 support points.
- 3 year guarantee.
- ΔΔ : 8 kg.



Icon	Description
CR.S7PRO	Foam protection

Small parts stand

CR.P3

- For simultaneous painting of three components.
 - The branches can be removed to allow proper application of paint.
 - The height and the spacing of the arms can be adjusted to provide a comfortable working position and for supporting longer items.
 - Dimensions : 1,040/1,180 x 1,000/1,300 x 370 mm.
 - Supplied with 500 double-sided adhesive tabs for securing the parts in place.
- ΔΔ : 5 kg.

	Description
CR.P3-1	Roll of 500 adhesive tabs



Steps

CR.S2

- Ideal for raised working on light commercial vehicles, multi-purpose vehicles, 4x4, etc.
 - Wide working width.
 - Maximum supported weight by CR.S2 140 kg.
 - Compact design.
 - Incorporates safety hoop, stable base and other safety features.
 - Folds for easy storage.
 - Two wheel positions : front, rear or right, left.
 - Suitable for use on paint booth open-mesh flooring.
 - Dimensions : 80 x 100 x 200 cm.
 - 3 year guarantee.
- ΔΔ : 37 kg.



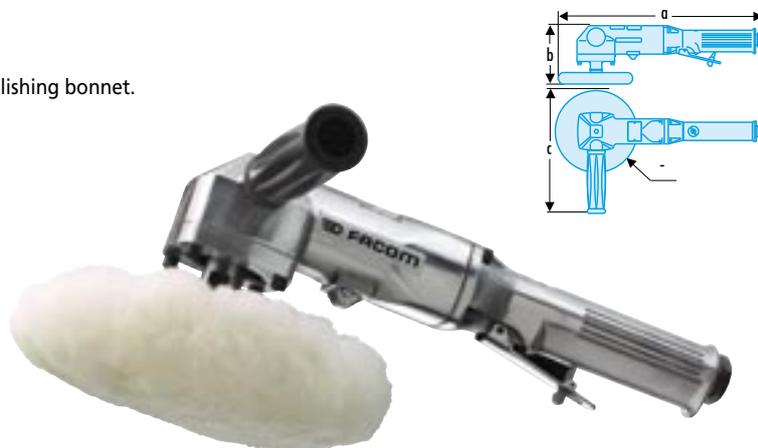
▶ Finishing

▶▶ Pneumatic bodywork tools

Angle polisher 178 mm.

V.252

- Buffing and polishing.
- Heavy-duty machine.
- Supplied with 1 handle, 1 pad 178 mm dia, 1 195 mm polishing bonnet.
- Air connection (female thread) : 1/4".
- Recommended air hose (Ø int.) : 8 mm.
- Recommended fitting (thread - Ø int.) : 1/4"-6.
- Pressure : 6.3 bar.
- Speed of rotation : 2,000 rpm.
- Average air consumption : 470 l/min.
- Noise level (dB(A)) : 82.4.
- Vibration level : < 2.5 m/s².
- Tray : 178 mm.



	a	b	c	Ø	ΔΔ
	mm	mm	mm	mm	kg
V.902	320	103	230	178	1,8

	Description
V.902A1	178 mm pad
V.902A2	195 mm polishing pad
V.902A3	160 mm foam pad



- ▶ **Windshields**
- ▶▶ **Workstations**



Windshield workstation

EFFICIENT, MORE ORGANISED STORAGE

- *Specially designed to allow the user to change all types of windshield in the minimum amount of time with maximum safety.*
- *Adjustable arms for car and LCV windshields.*
- *Foam windshield support pads*



EASY TO MAINTAIN

- Galvanized steel worktop, resistant to chemical agents, solvents, etc.

EVERYTHING WITHIN EASY REACH

- Drawer, shelves and perforated side panels provide ample space for the necessary tools.

CORNER BUMPERS

- To avoid damage to vehicles in case of accidental contact.



LOCKABLE ADJUSTABLE ARMS

Supplied without tools and consumables



PADLOCK CLOSURE

Windshield workstation

CR.T2

- Drawer 130 mm high (padlock closure), tool shelf and storage area for consumables.
- Supplied with a paper-roll holder and two bottle shelves.
- Galvanized steel worktop with adjustable arms for supporting light vehicle and heavy-duty vehicle windshields.
- Foam windshield support pads.
- Padlocked drawer.
- Dimensions 1,050 x 970 x 610 mm.

ΔΔ : 48 kg.

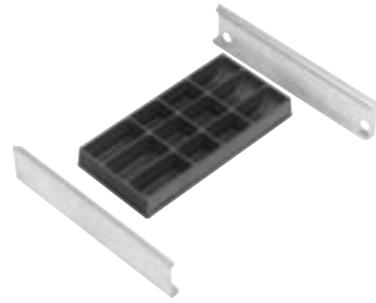
CR.T2			
1	2825.08	3	2600.19
2	2825.09		



Drawer kit

CR.A1

- Organization kit for drawers min 130 mm high.
 - For storing clips, staples and rivets.
 - Includes fixings.
 - For workstations CR.T2, CR.T3, CR.T4.
- ΔΔ : 250 g.



▶▶ Windshield tools

CR.D10

Windshield wiper arm remover

COMPACT, LIGHTWEIGHT, EASY TO USE



- Covers more than 95% of european vehicles.
- Chrome beam and legs.
- Legs can be adjusted in the same way as bearing pullers.



Special spacer for washer jet



Windshield wiper arm remover

CR.D10

- One tool covering 95% of european vehicles.
- Including spacer for wiper arms with integral washer jet.
- Each leg can be removed for a better fit on the arm.
- Weight including spacer 195 g.
- Chrome beam and legs, black screw.
- Supplied with instructions.

ΔΔ : 220 g.



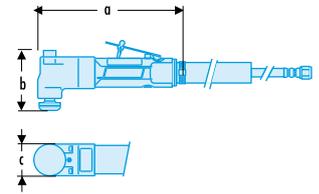
Windshield cutter

CAD.P300

- Faster windscreen replacement.
- Safety trigger.
- Air exhaust in handle.
- 3° pendular motion.
- Supplied with instructions, without blades.
- Strokes per minute : 20,000.
- Average air consumption : 110 l/min.
- Air inlet thread : 1/4".
- Ø int. air hose : 10 mm.



	a mm	b mm	c mm	ΔΔ kg
CAD.P300F	208	85	45	1.21
	Description			
CAD.P300A1	Long flat blade 90 mm			
CAD.P300A2	Hook blade 36 mm			
CAD.P300A4	Curved blade 30 mm			
CAD.P300A5	Scraper blade 8 mm			
CAD.P300A6	Straight blade 35 mm			
CAD.P300A7	Thin straight blade 35 mm			
CAD.P300A8	Straight angled blade 35 mm			
CAD.P300A9	Hook blade 24 mm			
CAD.P300A10	Disc 60 mm			
CAD.P300A11	Long angled blade			
CAD.P300A12	Long angled blade			



Windscreen cutters



Blade	Description
CAD.P300A1	Long flat blade 90 mm
CAD.P300A2	Hook blade 36 mm
CAD.P300A4	Curved blade 30 mm
CAD.P300A5	Scraper blade 8 mm
CAD.P300A6	Straight blade 35 mm
CAD.P300A7	Thin straight blade 35 mm
CAD.P300A8	Straight angled blade 35 mm
CAD.P300A9	Hook blade 24 mm
CAD.P300A10	Disc 60 mm
CAD.P300A11	Long angled blade
CAD.P300A12	Long angled blade

Each blade reference corresponds to a single blade

Characteristics	CAD.P300
Oscillations per minute	20 000
Weight (kg)	1,21
Length (mm)	208
Average air consumption (l/min)	120
Air inlet thread (inches)	1/4
Ø int. air hose (mm)	10
Working pressure (bar)	6,2

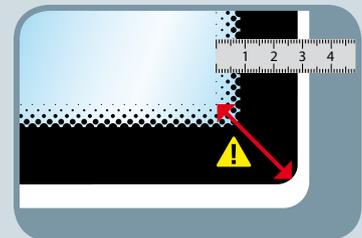


Windscreen cutters

- Using a ruler, measure the depth of glue to be cut, up to the windscreen's printed markings.



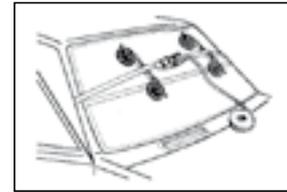
- Select the corresponding blade, taking account of the rounded corners.



Windshield replacement kit

D.28B

- Suction cups for carrying and positioning windshields during replacement.
 - Swivel suction cups cater for straight and curved surfaces.
 - Light alloy body.
 - Comprising :
 - D.28A1 Suction cups (x2).
 - D.28A2 Ratchet strap.
 - D.28-3 Removal tool.
 - D.28-4 Pull handle.
 - D.28-5 Braided wire for windshields (18 metres).
- ΔΔ : 3.3 kg.



Windshield tools

D.80

- Set of 3 tools supplied in a plastic case.
 - Comprising :
 - D.80-01 Windshield fitting tool.
 - D.80-02 Trim fitting tool.
 - 82.4 Hexagon key (4 mm).
 - Dimensions : 325 x 135 x 50 mm.
- ΔΔ : 820 g.

	Description
D.80-02-04	For narrow trim
D.80-02-05	For medium trim
D.80-02-06	For wide trim



Set of 6 suction cups

DCR.20J6

- Excellent suction on painted panels and windows.
 - Secures bonded components while curing.
 - Many bodywork applications :
 - Door trims
 - Windshield trims
 - Names and badges.
 - Interior mirrors, etc.
- ΔΔ : 470 g.



Adjustable windshield support

2800.A8

- Instantly attaches onto a roller cabinet.
 - Dimensions : 540 x 160 x 100 mm.
- ΔΔ : 2.8 kg.

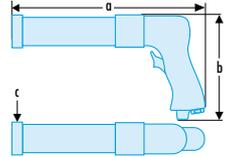


▶▶ Pneumatic bodywork tools

Caulking gun - 50 x 215 mm cartridge

V.801

- For applying silicon, mastics, adhesives, etc.
- Variable flow.
- Automatic pressure release halting flow of mastic.
- Air connection (female thread) : 1/4".
- Recommended air hose (Ø int.) : 10 mm.
- Recommended fitting (thread - Ø int.) : 1/4"-8.
- Pressure 6.2 bar.
- Noise level 70.
- Vibration level : < 2.5 m/s².
- Standard cartridge : 50 x 215 mm.



➤	a	b	c	ΔΔ
	mm	mm	mm	kg
V.801F	305	168	62	1,3

▶ Hydraulic equipment

4 T hydraulic straightening kit

CR.4T

- 15-piece kit comprising :
 - 1 hand pump (270 cm³).
 - 1 push-jack (122 mm stroke).
 - 1 plier-spreader jack.
 - 5 extension pieces (115 to 534 mm).
 - 7 accessories : flat base, spreading legs, heads (V, chequered, rubber).
- Quick couplers.
- 700 bar working pressure.
- Supplied in a storage case.
- CE.
- ΔΔ : 21.4 kg.



10 T hydraulic straightening kit

CR.10T

- 15-piece kit comprising :
 - 1 hand pump (600 cm³).
 - 1 push-jack (154 mm stroke).
 - 1 plier-spreader jack.
 - 3 extension pieces (115 to 534 mm).
 - 7 accessories : flat base, spreading legs, heads (V, chequered, rubber).
- Quick couplers.
- 700 bar working pressure.
- Supplied in a wheeled storage case.
- CE.
- ΔΔ : 37.1 kg.



Hydraulic oil - 2 litres

WA.21

- 2 litre can.
- Suitable for hydraulic bodywork jacks, lifting jacks, cranes and pit jacks.



Heavy goods and industrial vehicles

► Engine



SERVICES



- **DEMONSTRATIONS**
- **TECHNICAL ENQUIRIES**
- **NEW PRODUCTS ONLINE**
- **AUTOMATED TOOL KIT INVENTORY**

If you wish, you can arrange a visit by a FACOM advisor to carry out an inventory of your tools (roller cabinets, tool boxes, work benches, etc)

Advice, demonstrations

- *If you wish to have a presentation or a demonstration, simply contact our sales department or your distributor to arrange for a FACOM advisor to visit you. Sales department :*



Internet.

- *Discover the latest additions to our range, consult our catalogue, visit our HGV corner or search the vehicle applications guide online at*



Technical information.

- *If you are looking for information on a product or a spare part...*

p. 868



Tool kit inventory

- *Save time.*
- *Optimise your costs.*
- *Control your tool budget.*
- *Individual limits and harmonisation of tool kits will simplify the change-over to ISO.*

1. *During the initial inventory, we establish with you for each of your workers (mechanical, bodywork, electrical, 24-hour service, etc.) a computerised list of the tools in their tool kit.*
2. *Once a year, at a pre-arranged time, we will perform an inventory on the basis of the original list. This will enable you to accurately monitor your available tools, to keep it up to date and make everyone accountable. You will efficiently complete your workshop's equipment. (Service only available in Mainland France).*



►► General tooling

New

3/4" ratchet

A HEAVY-DUTY RATCHET FOR EVERY APPLICATION

COMFORT OF USE

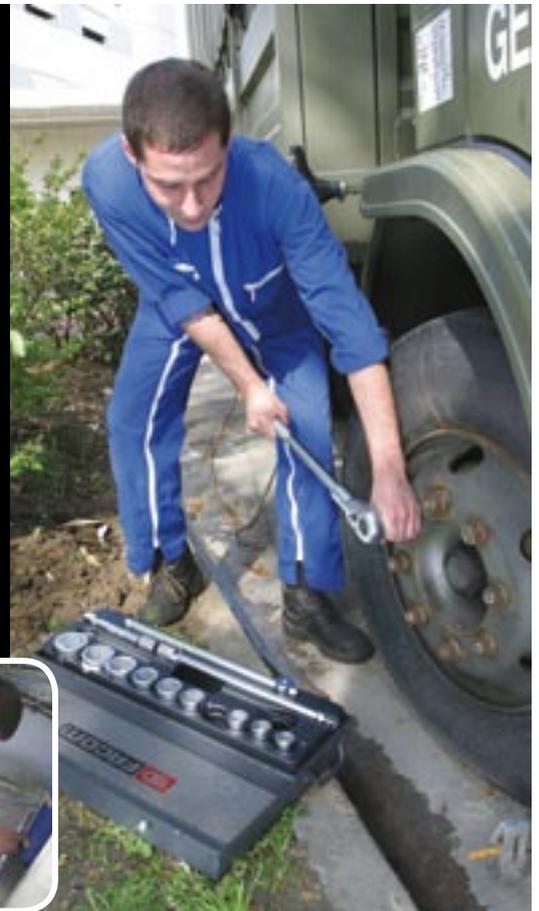
- Ergonomic reverse lever for easy inversion even when wearing gloves.
- Recessed reverse lever avoids accidental change of direction.
- Removable handle.

DURABILITY

- Sturdy : 40 tooth mechanism, 9° increments.
- Mechanism protected against dirt.

SAFETY

Plunger lock ratchet/sockets/accessories.



Farming machinery



Heavy industry

Heavy goods vehicles

New

3/4" square drive "Site" ratchet

K.149

▷ Performance : to ISO 3315, DIN 3122, NF ISO 3315, NF ISO 1174-1.

- Suitable for outdoor working.
 - Sturdy mechanism protected against dirt.
 - Recessed reversing switch :
 - 9° increments.
 - Removable handle.
 - Length : 510 mm.
 - Mechanism : 40 teeth.
 - Plunger safety lock.
 - Mat chrome finish.
- ΔΔ : 2.85 kg.



Description
K.149RN Repair kit
K.149M Handle for ratchet K.149



Pullers

POWERFUL, SAFE, EASY



Safety first

Make the right choice.

Pulling is a delicate operation, take the time to select the right tool according to :

- The component
- The size
- The clearance
- The grip : inside or outside

- For your safety, never alter a puller
- Refer to the Pullers section for details of our complete range designed and developed to cater for all situations from 5 to 800 mm.



New

10T hydraulic puller set with 4 sets of legs

U.312HJ4

- Comprising :
 - 10 tonne (100 kN) hydraulic jack U.312-01 + guide U.312-02 + set of 2 extensions U.312-03.
 - A 2 or 3-leg puller body U.312-04 + centring screw U.312-04-01 + set of 3 screws/nuts U.312-04-02.
 - 3 outside-gripping legs U.312G110 : Spread : 45 to 85 mm ; Max. reach : 110 mm.
 - 3 outside-gripping legs U.312G160 : Spread : 80 to 170 mm ; Max. reach : 160 mm.
 - 3 outside-gripping legs U.312G210, Spread : 90 to 210 mm ; Max. reach : 210 mm.
 - 3 outside-gripping legs U.312G260, Spread : 110 to 270 mm ; Max. reach : 260 mm.
- Supplied in a plastic case U.312VAL 565 x 412 x 105 mm.
- ΔΔ : 14.4 kg.

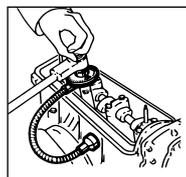


►► Cylinder head - pistons - valves

DM Angular torque gauge

- 2° graduations.
- Male and female drive.
- Fixed point by flexible arm with magnet.

	<input checked="" type="checkbox"/>	∅	L	ΔΔ
		mm	mm	g
DM.360	1/2	63	410	350
DM.370	3/4	73	430	550



Piston ring compressor 100 to 160 mm

750.KB

- For easy insertion of piston into cylinder bore and even compression over full ring length.
- Ratchet mechanism.
- Complete with key 6 mm.

	∅	L	ΔΔ
	mm	mm	g
750.KB	100...160	80	300
750.C		Description	
		Key only	

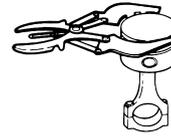


Piston ring pliers

751.K

- Even expansion over full ring length.
- Quick and easy to use.

Ø	∆∆
mm	g
751.K	90...150
	255
	330

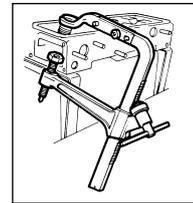


Valve lifter

U.13L

- For removing valve springs.
- Complete with jaws U.13B.
- Dimensions : 265 x 365 x 20 mm.
- ∆∆ : 1.14 kg.

	Description
U.13A	Straight bottom-edge jaws
U.13C	Straight top-edge jaws



►► Cooling

Refractometer

780A

- 2 measuring scales :
 - Coolant : 0 to -50°C (5° graduations).
 - Battery fluid density : 1,10 to 1.40 kg/l.
- Simple screw recalibration using distilled water.
- Supplied in a case with a sampling pipette and screwdriver.
- Dimensions : 70 x 235 x 700 mm.
- ∆∆ : 550 g.



Large diameter hose remover

DM.44PL

- Tool consisting of a body and a moving jaw that adjusts to fit hose diameters between 48 and 115 mm.
- Compact and manoeuvrable.
- Pins on the body grip the hose, allowing it to be loosened and removed.
- Multi-thread screw allows fast pre-tightening.
- Handle size : 36 mm. Grip : 90 mm.
- Height : max opening 255 mm
- Removable handle.
- ∆∆ : 769 g.



► Lubrication - filtration

Self-gripping HGV oil-filter wrench

D.151PL

- Drive : \square 1/2".
- Diameter : \varnothing 95 to 165 mm.
- $\Delta\Delta$: 1.345 kg.

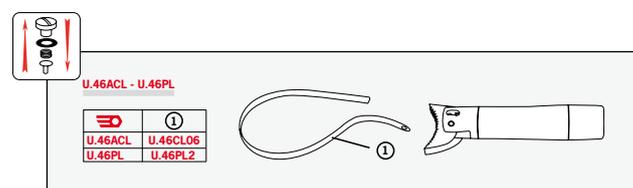


Adjustable oil-filter wrench \square 105 to 145 mm

U.46PL

- For heavy goods vehicles.

	L max	\varnothing mm	$\Delta\Delta$ g
U.46PL	300	105...145	350



► Brakes

Disc brake vernier caliper

DF.18-01

- Vernier caliper for checking the thickness of brake discs.
- Accurate, error-free reading.
- Measurements can be taken with wheel in place (if no protective bodywork).
- Can quickly demonstrate to customers the need for changing brakes.
- Supplied in a reinforced fabric case with serial number for traceability in ISO certified workshops.
- Capacity 0 to 50 mm, outer thickness measurement for the disc brakes of cars and LCVs.
- Nose length : 50 mm.
- 0.1 mm reading increments.
- Mechanical memory device.
- $\Delta\Delta$: 250 g.



Drum brake vernier caliper

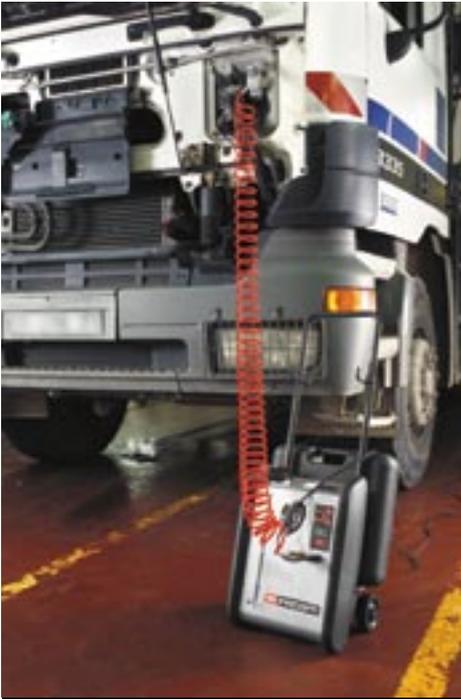
DF.19PL

- Capacity and reading to suit the requirements of car, LCV and HGV applications.
- Supplied in a reinforced fabric case with serial number for traceability in ISO certified workshops.
- Capacity 50 to 500 mm, inner drum measurement for HGVs.
- Nose length : 150 mm.
- 0.20 mm reading increments for internal drum measurements.
- 0.10 mm increments for readings between tips.
- $\Delta\Delta$: 1.4 kg.



DF-21

Hydraulic clutch system bleeding and filling



HIGH PERFORMANCE FOR HGV WORKSHOPS

The bleeding and filling of HGV hydraulic clutch systems requires a higher flow rate.

The DF.21, with its new pump and adjustable pressure is ideal for this application.

Extensive connection options.

The DF.21 comes as standard with an aluminium plug for 44 and 45 mm diameter fluid reservoir openings and a multi-diameter plug for all sizes of opening up to 60 mm.



IMPORTANT

Take care, 2 types of fluid are used :

DOT, which is identical to LV brake systems, and Pentosine (mineral hydraulic fluid). These two fluids are absolutely non-miscible and mixing them could destroy your bleeder. Workshops using both of these products must therefore have two separate bleeders, one for each product. The DF.21 is supplied with a green label for sticking onto the front of the machine to differentiate it if Pentosine is used.

New

Adjustable-pressure electronic brake bleeder

DF.21

- For bleeding car and LCV brakes and HGV clutches
- Pressure adjustment from 0.5 to 3 bar.
- Up and Down pressure adjustment keys.
- Electronic pressure control holds pressure steady at the selected value.
- ABS compatible.
- Portable, stand-alone appliance (12 V).
- Reservoir with visible level.
- Automatically stops below minimum level.
- Capacity : 5 l.
- Body : stainless/ABS
- Length of hose and power cable 4 m.
- Metal accessory storage case.

1 multi diameter plug for using the bleeder on vehicles with a bayonet plug (DF.20-12).

1 screw plug with 90° connection (DF.20-07).

1 fluid collector with attaching chain.

ΔΔ : 12 kg.



Heavy goods and industrial vehicles

Universal plug for bleeding brakes and clutches of LVs and HGVs.

DF.20-12

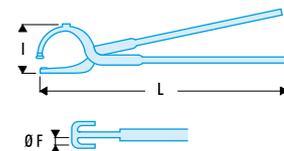
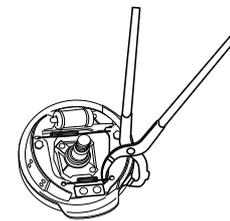
- Can be used for bleeding the brakes and clutches of 90 % of vehicles.
- Claw system overcomes the many different bayonet shapes and different types and diameters of screw threads used by the various vehicle manufacturers.
- Fits most Asian makes (except Honda).
- Can also be used for bleeding the HGV clutches .
- Working diameter : 35 to 83 mm.
- Minimum clearance required above the jar : 80 mm.
- Maximum working pressure of the bleeder : 3 bar.
- Connection by Rectus series 21 male coupling.
- Dimensions : 115 x 195x 85 mm.

ΔΔ : 475 g.



196 Brake-spring pliers

- For removing shoe springs.
- Suitable for right-handed and left-handed working.



Σ	Ø F mm	L mm	I mm	ΔΔ kg
196.TS	3	350	83	0,58
196.KS	5	485	100	1,23



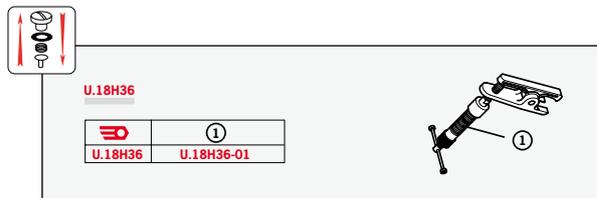
► Wheels - steering - transmission

Hydraulic HGV hub puller

U.18H36

- Possible applications :
Volvo, Rvi, Scania, Mercedes.
- Capacity \varnothing 36 mm, for HGV and coach ball joints.
- Cylinder force 8 tonnes.
- W x L x H : 100 x 480 x 400 mm.

	Capacity \varnothing mm	Dimensions mm	$\Delta\Delta$ kg
77A.PL1	36	100 X 480 X 400	6,8



HGV ball-joint separator

U.18-36

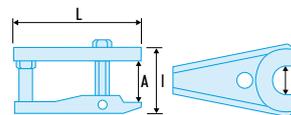
- Mechanical screw version.
- Capacity \varnothing 36 mm.
- Dimensions : 210 x 180 x 80 mm.
- $\Delta\Delta$: 4.32 kg.



Ball-joint separator

U.16B32

- For removing steering and suspension ball-joints.
- Length : 158 mm, height : 75 mm.
- Capacity \varnothing 32 mm opening 80 mm.
- $\Delta\Delta$: 2.41 kg.
- U.16-05J3 : Set of 3 shear pins.



LCV, HGV and Construction vehicle ball-joint separator

U.16A45

- For removing steering and suspension ball-joints.
- Length : 158 mm, height : 75 mm. 90 mm.
- Capacity : \varnothing 45 mm opening 80 mm.
- $\Delta\Delta$: 2.543 kg.



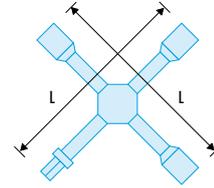
Heavy goods and industrial vehicles

77A. Cross braces - HGV series

- Designed for removing wheel nuts on cars, light commercials and heavy goods vehicles.
- Replaceable bit on wrenches featuring a square bit.

Ref	Ø mm	□ "	L mm	ΔΔ kg
77A.PL1	24/27/30/32	-	700	4,65
77A.PL2	24/27/33	3/4	700	4,58
77A.PL2D	24/27/32	3/4	700	4,600

Ref	Description
77.P1	Spare male 3/4" square bit



Automatic reset wrench with removable ratchet 200-1,000 Nm

K.322

▷ ISO 6789, DIN EN ISO 6789, NF EN ISO 6789.

- Accuracy ex works : ± 4 %.
- Reliability of mechanism : 50,000 cycles (wrench to 200 Nm).
- For use with 9x12 or 14x18 accessories
- One-way wrench convertible to two-way by inverting accessories.
- Numbered and supplied with an ISO 6789 calibration certificate.
- Set supplied in a plastic box with pivot handle (except R.306A25, R.301A).



Ref	Capacity N.m	Attachement Ø	Graduation N.m	Set contents			Dimensions wrench only		Dimensions including case		
				Wrench	Ratchet	Pivot knob	L (mm)	ΔΔ(kg)	Case	L (mm)	ΔΔ(kg)
K.322	200-1000	30	4,00	K.325D	K.151A	-	1280	5,9	BP.D1000	1418	13,50

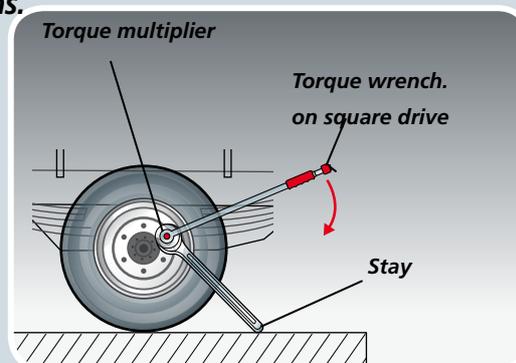


TORQUE MULTIPLIERS

CONTROLLED TORQUING

These tools have two functions.

- *High-torque loosening.* (e.g. construction vehicle or HGV wheel nut) A lever arm, ratchet or sliding tee may be used.
- *High-torque tightening.* A torque wrench should preferably be used to achieve a tightening torque that is both accurate and in line with manufacturers specifications.



IMPORTANT

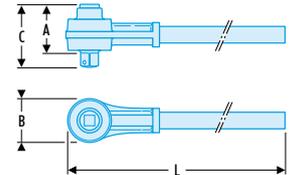
Pneumatic impact wrenches must not be used with this type of tool.



18 Heavy goods and industrial vehicles

MC Torque multipliers

- Compact lightweight models designed for maintenance work on light commercials, heavy goods vehicles, farm machinery and construction plant.
- Multiplying ratio : 3.4.
- Accuracy +/- 10% (+ accuracy of torque wrench).
- Supplied in a soft case with stop lever.



Model	Capacity min N.m	Capacity max N.m	A x B x C x L mm	Weight kg
MC.140A	1400	2700	63 x 90 x 85 x 600	3,2
MC.270A	2700	4750	80 x 95 x 113 x 680	5,1

Air tools

ESSENTIAL FOR YOUR PRODUCTIVITY
Powerful, lightweight, manoeuvrable
 See section 14 for details of our complete air tool range.

p. 575

NK.2000F

NS.1800F

NM.1200F

Electricity

Hydraulic crimping pliers

789.5

- Faster and more reliable than soldering.
 - 5 dies : 10 - 25 - 35 - 70 mm² hexagonal pattern.
 - For crimping electric terminals between 10 and 70 mm².
 - Possible applications : alternators, starters, tailgates, trailers, etc.
 - Head rotates 360° for ease of use where access is restricted.
 - Adjustable stroke from 5 to 8 mm.
 - Supplied in a case complete with 5 dies.
 - Plier dimensions 215 x 180 x 30 mm.
 - Factory quality crimping and shape ensured by 35,000 N cylinder and end of crimping release system that guarantee the correct pressure.
- ΔΔ 1.7 kg.



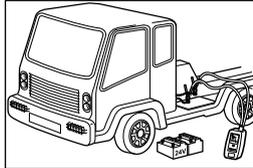
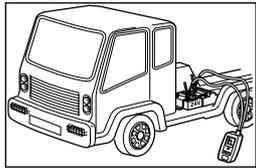
Heavy goods and industrial vehicles

24V surge limiter

DX.8-24

- Cable length : 500 mm.
- Identical specification except 24 V.

	L x l x H mm	ΔΔ g
DX.8-24	100 x 20 x 45	190



HGV electrics

- **A COMPREHENSIVE RANGE**
- **TESTING AND MEASURING**
- **ON-BOARD ELECTRONICS**



789.5 Crimping pliers

For electrical tools, see "Electricity", page

631



712 multimeter clamp

For multimeter, see "Automotive electrics" section, p.

651



HGV tools



HGV vehicle tool sets

p. 54

