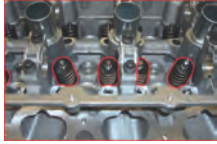


Valve spring assembly tool

- Required the assembly and removal of the valves
- Universal usage
- Enormous time and cost saving
- Expansion of the cylinder head is generally not necessary
- Special steel

Application range: BMW, Ford, Mercedes, Opel, Porsche, VAG etc. with SV OHV and OHC engines



	Length mm	Weight kg
150.0918	305.0	745

Valve spring clamp for Ford CVH-engines

- For clamping the valve springs in the course of restoration works in the area of the cylinder head

Application range: 1.3 / 1.4 and 1.6 litre of CVH engines in the Escort (incl. XR3i and RS Turbo), Fiesta (incl. RS Turbo) and Orion



	W mm	L mm	Weight kg
150.1160	24	100.0	320

Valve spring tension

- Easy and quick change of the valve
- Expansion of the cylinder head is not necessary
- Use in conjunction with pneumatic adapter 150.1105 / 150.1107
- Special steel



	L mm	Weight kg
150.1210	130.0	442

Valve spring compressor for VAG

- For retaining the valve springs
- Replaceable plastic pressure piece
- Chrome vanadium
- Surface finished in chrome

Application range: e.g. VAG with tappet engines 1.3 – 1.8l with stud bolts M8



	Length mm	Open Stud piece	Weight kg
150.0919	405.0	150.0919-1	700

PSA - Valve spring compressor

- For the professional engine repair
- For retaining the valve springs
- Universal usage
- Includes 8 screws with pressure cone and 2 locking screws
- Chrome vanadium
- Very high degree of accuracy

Application range: Citroën Berlingo, Xsara petrol engines with 1.0, 1.1, 1.4, 1.6l, and Peugeot 106, 205, 206, 306, 307, 405 with petrol engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



	Length mm	Weight kg
400.9001	390.0	2.50

Valve spring clamping yoke

- Robust, adjustable and cam assembly tool with parallel stroke
- The tool is to be sure special for motors with horizontal camshaft (OHC motors) conceives, can however also be used in small and medium-sized OHV engines where needed
- The activity handles locks automatically after the clamping of the valve spring so that the hands remain free for removing and/or placing of the valve wedges

Application range: Passenger cars and vans

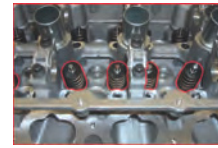


	Type	Min span depth mm	Max span depth mm	Span width mm	Pressure pad small	Pressure pad big	Weight kg
150.1135	1	10.0	135.0	160.0	25.0	30.0	2.00
150.1140	2	20.0	120.0	240.0	25.0	30.0	2.00

Valve spring compressor for Peugeot

- For assembly and removal of valve springs
- For fi ted or removed cylinder head
- For valve springs with tappet with Ø 38.0 mm
- Universal usage
- Chrome vanadium

Application range: Peugeot



	Length mm	Weight kg
150.0924	400.0	1.22

Valve mounting bridge set

- For assembly and removal of valve springs
- For fi ted or removed cylinder head
- Can be used universally with various assembly and adjustment options
- Enormous cost and time saving
- Removal of cylinder head not necessary for repair of valve shaft seals or valve springs
- Flange fastenings can be attached crossways or parallel to the cam shaft axis from the cylinder head
- Optionally upgradeable with specific pressure pieces
- Special steel

Application range: All cylinder heads from 1 to 12-cylinder engines, 2 to 4 valve technology for which the valves are arranged in a row or in a V.



	Weight kg
160.0270 15 pcs Valve mounting bridge set	8.28

consists of:

	X	Weight kg
160.0271	2 Foot	1240
160.0272	1 Rod	1940
160.0273	2 O-ring 17 x 4	10
160.0274	1 Pressure lever	880
160.0275	1 Threaded pin M8 x 50	20
160.0276	1 Clevis with spring cap bolts M8 x 32	60
160.0277	4 Thrust bolt	60
160.0279	2 Hexagon bolt M8	10
160.0295	1 Valve pressure adaptors for mounting bridges	120

Valve pressure adaptors for mounting bridges

- For assembly and removal of valve springs
- For use in conjunction with valve mounting bridge
- Special steel



		Suitable for	
160.0280	Pressure adaptor external Ø 21 mm	Peugot, Citroën HDI	40
160.0281	Pressure adaptor external Ø 24 mm	Opel, Seat, Audi, VW	50
160.0282	Pressure adaptor external Ø 25 mm	Hyundai	60
160.0283	Pressure adaptor external Ø 28 mm	Toyota, Ford 16V	70
160.0284	Pressure adaptor external Ø 30 mm	Nissan	80
160.0285	Pressure adaptor external Ø 31 mm	Toyota	90
160.0286	Pressure adaptor external Ø 32 mm	Opel, Peugeot	100
160.0287	Pressure adaptor external Ø 33 mm	Renault 19/Clio	120
160.0289	Pressure adaptor external Ø 35 mm	Renault, Mazda, Peugeot 106, Mercedes M102, M104	130
160.0290	Pressure adaptor external Ø 37 mm	Fiat	140
160.0291	Pressure adaptor external Ø 38 mm	Peugot, Citroën	150
160.0292	Pressure adaptor external Ø 40 mm	Mercedes OM 601, 602, 603	160
160.0293	Pressure adaptor external Ø 42 mm	Ford	170
160.0294	Pressure adaptor external Ø 44 mm	Fiat Diesel	180
160.0295	Pressure adaptor external Ø 34 mm	BMW M40	120

Valve dismantling and assembly tool set

- Assortment for changing of defective sealings on the cylinder head
- Enormous time savings as the cylinder head does not need to be dismantled
- For a correct and damage free use
- In durable plastic storage case



150.1100	25 pcs Valve dismantling and assembly tool set	4.20

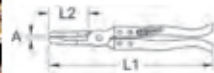
consists of:

115.1061	Valve shaft sealing Pliers, 275 mm	380
150.1101	Male coupling AG 1/4", TSC 06	20
150.1103	Male coupling AG 1/4", ORG 08	20
150.1104	Male coupling AG 1/4", IRC 06	20
150.1105	Pneumatic adaptor Ext.M14x1,25+M18x1,5 m	220
150.1106	Hold down	380
150.1107	Pneumatic adaptor tube AG M14 x 1,25 + M18 x 1,5	80
150.1108	Valve wedge tool, with magnet	60
150.1109	Pneumatic adaptor AG M24 x 2,0 + IG M14 x 1,25	150
150.1110	Valve spring plate Adaptor	130
150.1111	Connection shaft, 510 mm	710
150.1112	Valve shaft sealing Pliers, angled	330
150.1113	Assembly sleeve	120
150.1114	Impact arbor	310
150.1115	Screw and bolt set, 14 pcs for hold down	60
150.1116	Cheeks for bridge 2 pieces	260
150.1117	Assembly sleeve No.6 17 x 11 mm	40
150.1118	Assembly sleeve No.5 15 x 10 mm	40
150.1119	Assembly sleeve No.4 13 x 8 mm	30
150.1120	Assembly sleeve No.3 12 x 7 mm	30
150.1121	Assembly sleeve No.2 10 x 6 mm	40
150.1122	Assembly sleeve No.1 10 x 5 mm	40
150.1124	Screw set for cheeks, 8 pcs	100

VALVE SHAFT SEALING TOOLS

Valve shaft removal pliers

- Slim execution
- Plastic coated jaws
- Knurled handle
- With self opening mechanism
- Quick and easy removal of valves from the valve shaft
- For the extension of the valve spring lever
- Ideally suitable for engines with 4 valve technology
- Nickel plated execution
- Special tool steel



	A mm	L1 mm	L2 mm	
115.1061	0-125	275,0	100,0	380

Valve sealing ring pliers

- For removing valve shaft seals on 2-valve engines
- Hardened jaws
- Longitudinal teeth
- Functional area dip-insulated to avoid damage to the valve control
- Straight design
- Special steel

Application range: Volkswagen, Audi, Ford, Opel, Nissan etc.



115.3007	Valve sealing ring pliers	340

Valve sealing ring pliers, long

- For removing valve shaft seals on multi-valve engines
- For easy removal of deep seated valve shaft seals using extra-long jaws
- Hardened jaws
- Longitudinal teeth
- Functional area dip-insulated to avoid damage to the valve control
- Straight design
- Special steel

Application range: Volkswagen, Audi, Ford, Opel, Nissan etc.



115.3008	Valve sealing ring pliers, long	340

Valve shaft sealing pliers

- Slim design
- Knurled handle
- Quick and clean removal of valve shaft sealing rings
- For removal of the valve spring support
- Ideal for engines with 4 valve technology
- Nickel-plated finish
- Special tool steel



150.1112	Valve shaft sealing pliers	330

Valve plate pliers for Volkswagen

- For replacing the valve plates
- Tempered tips
- Special steel

Application range: Volkswagen tappet engines from 1.3 l

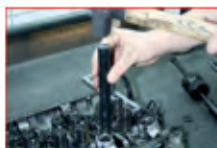


115.3009	Valve plate pliers for Volkswagen	220

Valve shaft seal pusher

- For pushing on valve shaft seals Ø 7.0 mm on multi-valve engines
- Universal usage
- Plastic

Application range: Multi-valve engines M104, M119, M120



	Length mm	Weight kg
150.0945	165.0	80

Valve shaft seal pusher

- For pushing on valve shaft seals Ø 7.0 mm and 8.0 mm
- Phosphate finish
- Special steel

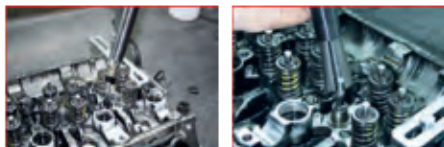
Application range: BMW and Opel Omega B 2.5l turbo diesel



	Length mm	Weight kg
150.8001	150.0	98

Slide hammer puller for valve shaft sealing ring

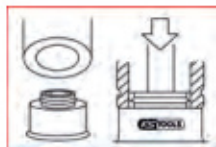
- Special construction allows quick and easy removal of seized valve shaft sealing rings
- Universal usage
- Secure working without damage to the tappet guide on the cylinder head
- With collet and plastic sleeve
- Special steel



	Ø diam mm	Length mm	Weight kg
150.0941	10 - 19	350.0	1.38

Valve shaft sealing ring tool set

- Permits the assembly and removal of valve shaft sealing rings
- Universal usage
- Damage-free operation due to wear-resistant plastic pusher
- Includes extra-long pliers and slide hammer puller with collets
- In durable plastic storage case



	Weight kg
150.3510 16 pcs Valve shaft sealing ring tool set	3.36

consists of:

	Weight kg
150.3511 Push-on mandrel Ø 9.5 mm	60
150.3512 Push-on mandrel Ø 10.0 mm	60
150.3513 Push-on mandrel Ø 10.5 mm	60
150.3514 Push-on mandrel Ø 11.0 mm	60
150.3515 Push-on mandrel Ø 11.5 mm	60
150.3516 Push-on mandrel Ø 12.0 mm	60
150.3517 Push-on mandrel Ø 12.5 mm	60
150.3518 Push-on mandrel Ø 13.0 mm	60
150.3519 Push-on mandrel Ø 13.5 mm	60
150.3520 Push-on mandrel Ø 14.0 mm	60
150.3521 Push-on mandrel Ø 15.0 mm	60
150.3522 Collet for valve shaft sealing ring	340
150.3523 Collet for valve shaft sealing ring, small	240
150.3524 Slide hammer puller basic unit	1220
150.3526 Plastic sleeve	20
115.3008 Valve sealing ring pliers, long	340

GASKET SCRAPER

STAINLESS STEEL Chisel scraper

- Ideal for removing stickers, seal and glue residues
- Also suitable for the removal and chiselling of plates or welding spots
- Heavy, continuous stainless steel blade that can be re-sharpened
- With reinforcement eyelet
- With hammer cap on the handle
- With ergonomic moulded two component handle
- Suitable for use at extremely low temperatures
- Extreme resistance to intergranular corrosion and oxidation
- Extremely long service life
- Autoclavable (heating of the tools to over 100°C to kill germs)
- Rust-proof and acid resistant
- Stainless steel



	B mm	D mm	L mm	Weight kg
907.2211	32.0	1.2	190.0	160
907.2213	25.0	1.2	165.0	100
907.2212	32.0	2.5	190.0	160
907.2214	25.0	2.5	165.0	110

STAINLESS STEEL Chisel scraper set

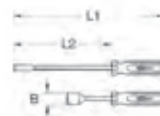
- Continuous stainless steel blade that can be re sharpened
- With reinforcement eyelet
- With hammer cap on the handle
- With ergonomic moulded two component handle
- Suitable for use at extremely low temperatures
- Extreme resistance to intergranular corrosion and oxidation
- Extremely long service life
- Autoclavable (heating of the tools to over 100°C to kill germs)
- Rust-proof and acid resistant
- Stainless steel



	Weight kg
907.2210 4 pcs 32 x 1.2; 32 x 2.5; 25 x 1.2; 25 x 2.5 mm	580

Gasket scraper

- Ideal for removing stickers, seal and glue residues
- Blades can be re-sharpened
- Blade 10° angled
- Extra-long design for hard to reach areas
- Also for removing extremely stubborn impurities and seal residue
- With ergonomic moulded one component handle



	B mm	L1 mm	L2 mm	Weight kg
907.2231	12.5	200.0	100.0	120
907.2232	25.0	200.0	100.0	140
907.2233	12.5	300.0	200.0	180
907.2234	25.0	300.0	200.0	200

Gasket scraper set

- Ideal for removing stickers, seal and glue residues
- Blades can be re-sharpened
- Blade 10° angled
- Extra-long design for hard to reach areas
- Also for removing extremely stubborn impurities and seal residue
- With ergonomic moulded one component handle



	Weight kg
907.2230 4 pcs 12.5 x 200; 25 x 200; 12.5 x 300; 25 x 300 mm	1.28

Gasket scraper set

- For removing seal residue, e.g. cylinder head seals
- With replacement blade
- Extra-long design for hard to reach areas
- Angled blade head
- With ergonomic moulded two component handle
- Special steel



907.2280	2 pcs	Gasket scraper set		180

consists of:

907.2281	Scraper, 270 mm			155
907.2282	Scraper blade			5

Scraper blades

- 5 replacement blades for seal scraper 907.2280
- For removing seal residue, e.g. cylinder head seals
- For angled blade head
- Special steel

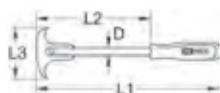


Content	Length mm	Width mm	Height mm		
907.2285	5	22.0	12.0	21.0	25

SEALING RING TOOLS

Double hook tool

- sickle-shaped
- For the removal of sealing rings
- Quick and easy to remove
- Long durability through hardened leverage
- Universal usage
- With one component handle



L1 mm	L2 mm	L3 mm	D mm		
550.1060	300.0	195.0	85.0	12.0	380

Slide hammer puller with thread tip

- For the removal of radial shaft seals and small bearings
- For hard to reach places too
- Quick and easy to remove
- Using the blow weight the thread tip is hit into the radial shaft seal and turned by hand and then removed with the blow weight
- Universal usage
- With two component handle
- Special steel
- Diameter of thread tip: 1,5 - 4,7 mm
- Total length of thread tip: 13,9 mm



Total length mm	Blow weight kg	Blade thickness mm	Impact weight kg			
150.3611	380.0	250.0	8.0	0.32	500	

Radial shaft seal remover set

- For the removal of radial shaft seals and small bearings
- For hard to reach places too
- Quick and easy to remove
- Using the blow weight the thread tip is hit into the radial shaft seal and turned by hand and then removed with the blow weight
- Long durability through hardened leverage
- Universal usage
- Special steel



150.3610	2 pcs	Radial shaft seal remover set		880

consists of:

550.1060	Gasket ring dismantling tool			380
150.3611	Slide hammer puller with thread tip			500

Hook tool set

- Ideal for removing and use of O rings and seals
- Special steel



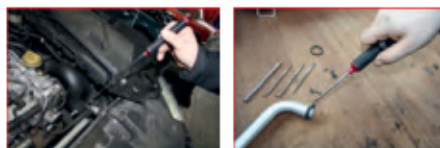
550.1040	2 pcs	Hook tool set		30

consists of:

550.1041	Hook tool with double blade 90° short/ 180° short angled			11
550.1042	Hook tool with double blade 45° long / 90° long			11

Magnet and hook tool set

- Ideal for removing and inserting O-rings and seals
- With telescopic magnet attachment and replaceable hook
- Storage compartment in the handle for the various attachments
- Special steel



550.1080	6 pcs	Magnet and hook tool set		70

consists of:

550.1081	Basic unit		35
550.1082	Telescopic magnet attachment, 90 - 390 mm		13
550.1083	Hook attachment, straight, 75 mm		5
550.1084	Hook attachment, 90°, 75 mm		5
550.1085	Hook attachment, 120°, 75 mm		5
550.1086	Hook attachment, lateral bend, 75 mm		5

Hook tool set

- Ideal for removing and use of O rings and seals
- With one component handle
- With hanging hole
- Special steel



550.1045	4 pcs	Hook tool set		120

consists of:

550.1046	Hook tool 120mm blade, straight version			27
550.1047	Hook tool 120mm blade, 45° angled version			27
550.1048	Hook tool 120mm blade, 90° angled version			27
550.1049	Hook tool 120mm blade, 135° angled version			27

Master hook tool set

- Ideal for removing and use of O rings and seals
- With hanging hole
- Special steel



550.1070	9 pcs	Master hook tool set	680
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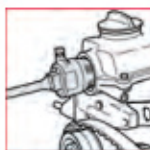
consists of:

550.1046	Hook tool 120mm blade, straight version	27
550.1047	Hook tool 120mm blade, 45° angled version	27
550.1048	Hook tool 120mm blade, 90° angled version	27
550.1049	Hook tool 120mm blade, 135° angled version	27
550.1071	Hook tool large, straight	91
550.1072	Hook tool large, 90° offset	105
550.1073	Hook tool large, sickle form	88
550.1074	T-handle hook tool, S-form small	42
550.1075	T-handle hook tool, S-form big	96

Sealing ring removal tool for VAG

- For the quick and correct removal of the sealing rings on engine shafts such as the crank shaft, cam shaft or intermediate shaft
- Enormous cost and time saving
- No need to strip the engine
- Universal usage
- With external drive hexagonal socket 22.0 mm
- With internal square drive to DIN 3120 / ISO 1174
- Special steel

Application range: e.g. Volkswagen, Audi, Seat, Škoda engines etc.



mm	Ø mm	Length mm	kg	
150.3616	22.0	27.0	67.0	465
150.3617	22.0	32.0	68.0	622
150.3618	22.0	55.0	69.0	757

Sealing ring assembly set for BMW

- For assembly and removal of sealing rings
- Specially for the front crankshaft radial sealing ring
- Includes puller and mounting tool
- Special steel
- In durable plastic storage case

Application range: BMW engines N40, N42, N43, N45, N45T, N46, N51, N52, N52K, N53, N54



150.3625	4 pcs	Sealing ring assembly set for BMW	2.18
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consists of:

150.3626	Extraction tool	500
150.3627	Mounting tool Ø 90 mm	280
150.3628	Mounting tool Ø 60 mm	560
150.3629	Mounting tool nut	100

Assembly tool set for sealing flange with sensor wheel

- For the correct and damage-free assembly of the sealing flange
- With integrated pulse sensor wheel
- Exact sensor wheel adjustment - Precise sensor signal
- No need for reworking with repeated removal of the gearbox
- Enormous time and cost saving

Application range: Volkswagen, Audi, Seat, Škoda, petrol and diesel engines e.g. 1.4, 1.4 16V, 1.4 TSI, 1.6 FSI, 1.6 TDI, 1.9 TDI, 2.0 TDI, 2.0 TDI BitDi, 2.0 TDI Quattro at Audi (A1, A2, A3, A4, A5, A6, Q3, Q5, TT), Volkswagen (Amarok, Beetle, Caddy, Eos, Polo, Golf, Jetta, Passat, Scirocco, Sharan, Tiguan, Touran), Seat (Alhambra, Altea, Cordoba, Exeo, Ibiza, Leon, Toledo), Škoda (Fabia, Octavia, Rapid, Roomster, Superb, Yeti)

MC: AHW / AKQ / APE / AXP / AZV / BAG / BCA / BLS / BKD / BKP / BLF / BMA / BMN / BMR / BNA / BRF / BUD / BXW / CAAA / CAAB / CAAC / CAAD / CAEE / CAGA / CAGB / CAGC / CAHA / CAHB / CAXC / CAYA / CAYB / CAYC / CAYD / CAYE / CBAA / CBAB / CBAC / CBBA / CBBB / CBDA / CBDB / CBDC / CCHA / CCHB / CDBA / CDCA / CEGA / CFCA / CFFA / CFFB / CFFE / CFFD / CFGB / CFGC / CFGD / CFHA / CFHB / CFHC / CFHF / CFHD / CFJA / CFJB / CGGA / CGGB / CGLA / CGLB / CGLC / CGLD / CJAA / CJCA / CJC / CJC / CJC / CKUB / CKUC / CKTB / CKTC / CLCA / CLCB / CLJA / CLLA / CLLB / CLNA / CMFA / CMFB / CMGA / CMGB / CMSA / CNEA / CNFA / CNFB / CSHA / CSLB



150.3650	7 pcs	Assembly tool set for sealing flange with sensor wheel	1.74
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consists of:

150.3651	1	Housing with centring pin	880
150.3652	1	Flange with spindle and nut	460
150.3653	2	Guide bolts, Ø 10 mm	30
150.3654	3	Guide bolts, Ø 6 mm	31

Universal crank seal remover and installer set

- Suitable for the damage-free and correct assembly and removal of radial shaft seals and drive shaft circlips
- For tight-fit application on engine shafts such as crank shaft, cam shaft or intermediate shaft
- Can used universally for radial sealing rings in diameters from 21.5 mm to 64.0 mm
- Enormous cost and time saving
- No need to strip the engine
- Prevents damage to the aluminium flange
- Set contents for extensive applications
- Includes puller and pressing tool
- Prevents the ring from becoming loose
- In durable plastic storage case

Application range: Extensive universal tool including pressing tools for radial sealing rings in diameters from 21.5 mm to 64.0 mm on almost all vehicles



700.1280	24 pcs	Universal crank seal remover and installer set	1.90
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consists of:

700.1277	Steel sleeve 22 mm, long for 700.1280	180
700.1278	Steel sleeve 27 mm, long for 700.1280	220
700.1279	Main body for 700.1280	140
700.1281	Hook 70 mm, for 700.1280 5 pcs	12
700.1282	Hook 114 mm, for 700.1280 5 pcs	22
700.1283	Adapter sleeve for 700.1280	75
700.1284	Nut 20.2 mm for 700.1280	25
700.1285	Nut 18.2 mm for 700.1280	23
700.1286	Nut 16.2 mm for 700.1280	21
700.1287	Nut 14.2 mm for 700.1280	19
700.1288	Nut 12.2 mm for 700.1280	17
700.1289	Nut 10.2 mm for 700.1280	15
700.1290	Nut 8.1 mm for 700.1280	10
700.1291	Adapter 27.6 mm for 700.1280	37
700.1292	Adapter 45.9 mm for 700.1280	27
700.1293	Adapter 48.9 mm for 700.1280	27
700.1294	Adapter 56 mm for 700.1280	35
700.1295	Adapter 64 mm for 700.1280	55
700.1296	Adapter 33.6 mm for 700.1280	35
700.1297	Adapter 41.9 mm for 700.1280	30
700.1298	Steel sleeve 10 mm for 700.1280	80
700.1299	Steel sleeve 18 mm for 700.1280	145

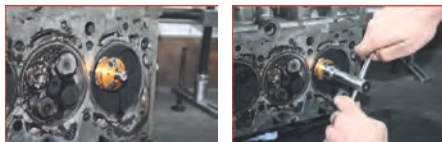


VALVE SEAT CUTTER

Universal valve milling set for valve seat machining

- For cutting valve seats on internal combustion engines
- Suitable for hardened valve seats (lead free)
- With seat angles 30° + 45° and correction cutters 30°, 60° + 75°
- Optimum cutting head guidance by means of expander pilots
- Clean cut surface with no chatter marks
- Adjustable working diameter by means of moveable cutting blades
- Cutter blades from special steel
- In durable plastic storage case

Application range: Passenger cars and vans



150.3570	12 pcs Universal valve milling set for valve seat machining	1.90	

consists of:

150.3571	Drive tool with T-bar	400	
150.3572	Cutting head, 45° + 75°, Ø 28-37 mm	50	
150.3573	Cutting head, 30° + 75°, Ø 28-37 mm, Ø 37-44 mm	65	
150.3574	Cutting head, 45° + 60°, Ø 37-46 mm	95	
150.3575	Cutting head, 30° + 75°, Ø 44-52 mm, Ø 37-46 mm	105	
150.3576	Cutting head, 45° + 30°, Ø 46-60 mm	175	
150.3577	Cutting head, 60° + 75°, Ø 52-65 mm	150	
150.3578	Expander pilot, Ø 7,0 - 8,0 mm	60	
150.3579	Expander pilot, Ø 8,0 - 9,5 mm	80	
150.3580	Expander pilot, Ø 9,0 - 11,0 mm	100	
150.3581	Expander pilot, Ø 11,0 - 12,5 mm	130	
150.3582	Pilot, Ø 5,5 mm	45	

VALVE CUTTER

Valve grinder

- With two sided sucker
- For grinding the valve seat in the cylinder head
- Body made out of sealed hard wood
- Suckers made out of rubber



		L mm			
150.1133	16/21	210.0	60		
150.1131	19/22	245.0	33		
150.1132	22/32	255.0	34		
150.1134	29/35	225.0	60		

Valve seat grinding set

- With two sided sucker
- For the bore on the valve seat in the cylinder head
- Body made out of sealed hard wood
- Suckers made out of rubber



150.1130	2 pcs Valve seat grinding set	2.21	

consists of:

150.1131	Valve set grinder 19/22 mm, 245 mm long	33	
150.1132	Valve set grinder 22/32 mm, 255 mm long	34	

Valve grinding tool with 2 suction discs

- 8 mm bore reception
- For the reception of the valve seats for repair work
- The detention of the device body is automatically generated via a transmission, the typical right left wing movement used in grinding
- Gives you convenient and rapid seat grinding with the drill between approx. 500-1.000 rpm



	L mm	Replacement plate Ø 22 mm	Replacement plate Ø 28 mm	
150.1165	130.0	150.1166	150.1167	442

Pneumatic valve grinding tool with 4 suction discs

- For grinding the valve seats after repair work
- Allows convenient and rapid grinding
- In durable plastic storage case



515.2005	5 pcs Pneumatic valve grinding tool with 4 suction discs	1.69	

consists of:

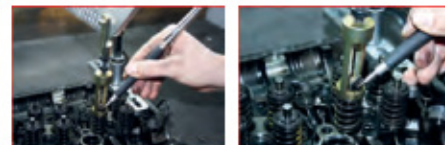
515.2006	Pneumatic valve grinder	1430	
515.2007	Sucker, Ø 20 mm	4	
515.2008	Sucker, Ø 30 mm	7	
515.2009	Sucker, Ø 34 mm	16	
515.2010	Sucker, Ø 45 mm	20	

VALVE WEDGE ASSEMBLY

Valve wedge assembly tool Ø 5mm, Opel, Volkswagen, Audi

- For the assembly of valve wedges
- Easy to fit even in cramped spaces
- Also suitable for valve springs that are arranged deep in the cylinder head or are sealed in a cup guide
- Allows easy and secure assembly of one- and three-grooved valve wedges on fitted and removed cylinder head
- Special steel

Application range: Opel, Volkswagen, Audi



150.7056	Ø mm	5	50

VALVE ADJUSTMENT TOOLS

Valve adjustment push-through square

- Push-through square
- Valve adjustment tool for spinning the engine when adjusting the valve, control times
- Serviceable from both sides
- For use with a 1/2" push-through ratchet
- Special steel

Application range: Mercedes engine type 102, 103, 104, 110, 115, 116, 117, 119, 120, 123



150.3585	Length mm	80.0	80

Ratchet

- Ratchet with 1/2" square drive
- E.g. for tuning the engine crank alignment tool



130.1000	L mm	270.0	500

Valve adjustment spanner

- For adjusting the valves
- Prevents the valve plate
- Universal usage
- Can be used in conjunction with 150.3589 or 150.3590
- Special steel



	mm	Length mm	kg
150.3587	30,0	170,0	135

Valve adjustment spanner

- For adjusting the valves
- Can be used in conjunction with 150.3587
- Can be used in pairs
- Special steel

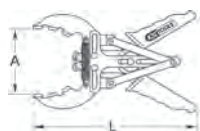


	mm	Length mm	kg
150.3589	14,0	225,0	140
150.3590	14,0	160,0	100

PISTON RING TOOLS

Piston ring pliers

- PVC dipped handle
- For the safe disassembly and assembly of piston rings
- Nickel plated surface
- Special tool steel



	Ø mm	A mm	L mm	kg
150.1175	50-100	0-100	210,0	305
150.1176	80-120	0-120	220,0	340
150.1177	110-160	0-160	280,0	445

Piston ring pliers

- Special wheel clamps with suspension hole for fixing the piston ring when splaying
- With restriction of the splaying dimension
- Special steel



	Ø mm	Ø	kg
115.1301	83-135	3.1/4" - 5.5/16"	330

Piston ring pliers

- For the removal and replacement of piston rings
- Suitable for most passenger cars and vans
- Plastic coated handle
- Self closing pliers
- Special steel



	L mm	kg
150.1179	221,0	210

Piston ring tensioning tool

- Flexible tool for assembly and removal of piston rings
- Profiled tension band Ø 38.0 mm
- Low friction between tension band and piston ring
- The profile band cannot slip between the piston and cylinder
- Universal usage



	Ø mm	kg
115.3014	75,0-125,0	123

Piston ring tension band set

- For the pretensioning of the piston rings when inserting the piston in the cylinder
- Self locking ratchet function
- Phosphate finish
- In durable plastic storage case



		kg
150.1150	7 pcs. Piston ring tension band set	1,62

consists of:

		kg
150.1151	Piston ring tension band plier	380
150.1152	Tension band, Ø 73 - 79 (2.7/8" - 3.1/8")	90
150.1153	Tension band, Ø 79 - 86 (3.1/8" - 3.3/8")	90
150.1154	Tension band, Ø 86 - 92 (3.3/8" - 3.5/8")	100
150.1155	Tension band, Ø 92 - 98 (3.5/8" - 3.7/8")	110
150.1156	Tension band, Ø 98 - 105 (3.7/8" - 4.1/8")	110
150.1157	Tension band, Ø 105 - 111 (3.7/8" - 4.3/8")	120

Piston ring tension band

- For the pretensioning of the piston rings when inserting the piston in the cylinder
- Continuous adjustment of operating tool
- Spring steel strip



	Ø mm	Ø	H mm	kg
150.1141	45 - 90	1.3/4" - 3.1/2"	50,0	158
150.1142	57 - 125	2.1/4" - 5"	100,0	300
150.1143	90 - 175	3.1/2" - 7"	100,0	340
150.1144	90 - 175	3.1/2" - 7"	165,0	555

CYLINDER LINER TOOLS

Securing straps for PSA

- Prevents the lift-off of the cylinder liners from their seat
- Securing straps prevent the cylinder liners coming away from the engine block
- Can be used with wet cylinder liners
- Supplied in pairs
- Special steel

Application range: Citroën, Peugeot and Renault engines



	Hole spacing mm	Hole diameter	Length mm	kg
150.3593	2 pcs	75,0-106,0	12,0 mm	130,0

Lever for cylinder head for PSA

- For removing cylinder heads on engines with wet cylinder liners
- Prevents the lift-off of the cylinder liners from their seat
- Cylinder head should not be lifted off, but instead rolled off to the side and secured with the securing straps 150.3593
- Supplied in pairs
- Special steel

Application range: Citroën, Peugeot and Renault etc.



	Head Ø mm	Length mm	kg
150.3594	2 pcs	12,0	280,0

CYLINDER HONING DEVICES

Cylinder honing machine

- For honing / deburring of cylinders, bearings, bores, pipes, etc.
- Interchangeable honing
- Automatic spigot end and exact honing
- Flexible drive shaft for air or electric drills
- Special steel

Application range: Automotive brake and clutch cylinders, engine cylinders of motor cycles, lawn mowers, outboard motors, hydraulic cylinders, marine and industrial engines, etc.



	Ø mm	Ans	Honing stone set	Weight
150.1180	18 - 63	2	150.1181	0.90
150.1185	19 - 69	3	150.1186	1.30
150.1190	32 - 89	3	150.1191	1.40
150.1195	51 - 177	3	150.1196	1.90

Replacement stones

- Replacement honing stones for 150.1195
- For Honing/Deburring of cylinders, bearings, bores, pipes, etc.
- Special steel

Application range: car brake and clutch cylinders, engine cylinders of motorbikes, lawn mowers, outboard motors, hydraulic cylinders, ship engines and industrial motors, etc.



		L mm	Weight
150.1181	2 pcs	28.8	10
150.1186	3 pcs	28.8	15
150.1191	3 pcs	51.0	30
150.1196	3 pcs	76.0	80

TEST AND MEASURING TOOLS

Precision straightedge

- In accordance with DIN 874/00
- Hand warmth protection
- Test area precise and finely engineered
- Flatness tolerance for highest accuracy
- For controlled and test working in the light gap procedure
- Hardened
- Stainless steel



	L mm	H mm	Weight
300.0630	50.0	25.0	40
300.0631	75.0	25.0	60
300.0632	100.0	25.0	80
300.0633	125.0	25.0	100
300.0634	150.0	25.0	120
300.0635	200.0	25.0	160
300.0636	300.0	25.0	240
300.0637	400.0	25.0	320
300.0638	500.0	25.0	400
300.0639	600.0	25.0	480

Precision straightedge

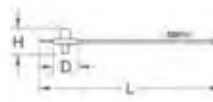
- For the inspection and the exact working on cylinder heads
- In accordance with DIN 874/1
- Double T profile - rail with rear 5 hand slots
- On edge and flat sides examination process
- Hanging hole
- Steel



	L mm	H mm	S mm	Weight
152.1090	600.0	30.0	16.0	2.10

Rotary angle disc

- For fastening screws at an angle
- Device for angle regulated fastening with a torque wrench
- Flexible arm
- Range 0° - 360°
- Square drive adaptor to DIN 3120 - ISO 1174 with ball lock
- Optionally with a magnetic arm or claw arm



	□	■	Ans	Pos.	D mm	H mm	L mm	Weight
516.1195	1/2"	1/2"	magnet	2°	67.0	63.0	480.0	170
516.1196	1/2"	1/2"	claw	2°	67.0	63.0	538.0	60

Electronic professional stethoscope

- For the professional defect diagnosis
- Serves the acoustic test and judgment of a component under load
- Delivers fast, absolutely clear and unambiguous test results over sounds
- Contains 6 independent sensors that can mounted for example on the vehicle floor or in the engine compartment for ease
- Simple coordination of the defect source through colour coded cable and colour table on the box
- In durable plastic storage case

Application range:

Engine: Valves, bearings, piston pins
 Alternator: Bearing sounds
 Differential: Barrel sounds
 Bodywork: Creak and squeak sounds



		Weight
150.1695	18 pcs Electronic professional stethoscope	2.50

consists of:

		Weight
150.1695	Headset for 150.1695	350
150.1695	Amplifier for 150.1695	115
150.1695	Hand held stethoscope for 150.1695	165
150.1695	Velcro strap for 150.1695, 8 pcs	9
150.1695	Sensor for 150.1695	10
150.1695	Colour coded cable for 150.1695, 6 pcs	755



Synchronous carburettor test device with 4 synchronous clocks

- For synchronous measurement on 2 – 4 carburetors with vacuum connection to the carburettor
- After adjustment and inspection of the valve clearances the carburetors should be synchronised
- Universal usage
- Unit for vacuum measurement: 0-70 cmHg / in0-30 inHg
- Generally necessary after a major inspection
- Optimum results for mechanical function-free engines
- Must be used with running engine
- Pressure gauges are fi ted on the plate
- In durable plastic storage case

Application range: Multi-cylinder engines require synchronous opening of the throttle valve. Through tolerances in the intake system, adjustment of the throttle valve stop is not sufficient. Dynamic adjustment is required here. Through synchronisation, the same vacuum is reached before the carburetors. A dial is required for each carburettor for synchronisation. Adjustment of the individual compressors is done via the adjustment mechanisms.



150.3600	28 pcs	Synchronous carburettor test device with 4 synchronous clocks	3.00
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consists of:

X			
150.3601	4	Pressure gauge Ø 92 mm fi ted on the plate	1600
150.3602	4	Rubber house 8 x 5 x 750 mm	20
150.3603	4	Hose clamp with replacement sealing ring	1
150.3604	4	Connection piece 53 mm, M6 x 0.75 mm	8
150.3605	4	Connection piece 60 mm, M6 x 1.0 mm	12
150.3606	4	Extension 3.9 x 52 mm	8
150.3607	4	Extension 3.9 x 122 mm	12

Oil pressure testing equipment

- Quick safe and problem free testing of the oil pressure on the engine
- incl. 10 adaptors
- Colour coding: Black= metric / silver = imperial
- Adaption with oil pressure sensor thread
- Manometer Ø 80 mm with rubber safety cover
- Flexible tube (L=1.3 m) with anti-kink device, decompression valve and quick coupling
- Robust execution
- In durable plastic storage case



150.1920	12 pcs	Oil pressure testing equipment	1.89
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150.1921	Manometer with tube, 10 bar	594	
150.1922	90° Adaptor angled	44	
150.1920-1	Screw adaptor no 1, R1/8"	23	
150.1920-10	Screw adaptor no 10, M18 x 1.5	34	
150.1920-2	Screw adaptor no 2, 1/8" x 27 NPT	24	
150.1920-3	Screw adaptor no 3, 1/4" x 18 NPT	33	
150.1920-4	Screw adaptor no 4, 3/8" x 20 UNF	23	
150.1920-5	Screw adaptor no 5, 1/2" x 20 UNF	27	
150.1920-6	Screw adaptor no 6, M10 x 1.0	24	
150.1920-7	Screw adaptor no 7, M12 x 1.5	24	
150.1920-8	Screw adaptor no 8, M14 x 1.5	29	
150.1920-9	Screw adaptor no 9, M16 x 1.5	33	

CO² Cylinder head leak testing set

- For the locating of leaks on combustion engines
- Rational and dependable finding of cracks and leakages
- Potential CO² content in the coolant solution is detected
- Ideally suited for the cylinder head, cylinder head seals and engine block
- Leakages are visible through discoloration of the test fluid
- For all current vehicles with water cooled engines (Gas, Diesel and Petrol)
- Automatic regenerating reaction fluid or multiple use
- In durable plastic storage case



150.1910	8 pcs	CO ² Cylinder head leak testing set	1.43
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consists of:

150.1911	Intake-squeeze bulb	30	
150.1912	Two way brass valve	120	
150.1913	Basic device with 2 Test chambers and cones	120	
150.1914	Reaction fluid , 250 ml	250	
150.1915	Empty container, 250 ml (for required fluid)	30	
150.1916	Bayonet Adaptor Gr 1	60	
150.1917	Bayonet Adaptor Gr 2	80	
150.1918	Bayonet Adaptor Gr 3	110	



Cylinder leak detector tester set

- For diagnosis of compression pressure loss
- Suitable for analysing inlet and outlet valves, piston rings or cylinder liner, cylinder head or head seal
- Better alternative for compression measurement
- Universal usage
- Integrated pressure reducer
- Necessary working pressure: 1.0 bar
- For use on engines at operating temperature
- In durable plastic storage case

Test results:

Outlet valves not tight:

Air noises in exhaust, manifold and cylinder head on the outlet side

Inlet valves not tight:

Air noises in intake, on cylinder head on the inlet side

Piston rings, pistons, cylinder bore damaged:

Air noises on the crankcase breather or on the dipstick

Cylinder head seal defective:

Air noises in the adjacent cylinder, spark plug bore

Cylinder head seal defective or tear in cylinder head

Air noises or bubble formation in the cooling system or reservoir



150.1780	9 pcs	Cylinder leak detector tester set	2.30
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consists of:

150.1781	Test device with dual display: Input pressure 0-7 bar + pressure loss display 0-100%	570	
150.1782	Hose 14/18 mm	132	
150.1783	House with adaptor	108	
150.1784	Adapter M10 x 1.0 mm	280	
150.1785	Adaptor M12 x 1.25 mm	310	
150.1786	Adaptor M14 x 1.25 mm	330	
150.1787	Adaptor M14 x 1.25 mm, long design	550	
150.1788	Spark plug adaptor M12 x 1.25 mm	251	
150.1789	Spark plug adaptor M14 x 1.25 mm	255	

Compression pressure test instrument for diesel engines

- Complete test tool set with or without direct injection
- Compact adaptor pieces with quick couplings
- Includes extensive adaptor assortment
- Very flexible tube for hard to access places
- In durable plastic storage case



Technical data:

Manometer:	0,0-70,0 bar
Tube length:	355,0
Manometer gauge:	bar, psi or KPA

150.1680	13 pcs	Compression pressure test instrument for diesel engines	2.56
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consists of:

150.1680-1	Manometer with tube	640
150.1680-2	Glow plug adaptor, M10x1,25	40
150.1680-3	Glow plug adaptor, M12x1,25	40
150.1680-4	Glow plug adaptor, M14x1,25	70
150.1680-5	Compression pressure test adaptor, 114mm	220
150.1680-6	Compression pressure test adaptor, M24x2	160
150.1680-7	Compression pressure test adaptor	60
150.1680-8	Glow Plug Adaptor M 10 x 1,25	60
150.1680-9	Glow plug adaptor, M10x1	45
150.1680-10	Compression pressure test adaptor	145
150.1680-11	Replacement sealings and washers	15
150.1680-12	Angle connecting piece	50
150.1680-13	Clamp arch	70

Digital compression pressure test set for petrol engines

- For dry and wet compression tests
- Compact adaptor pieces with quick couplings
- Includes extensive adaptor assortment and analogue manometer (psi)
- Digital manometer with reading storage up to 12 cylinders
- By means of brass coupling the repair is possible on valve seals without dismantling of the cylinder head
- Very flexible tube for hard to access places
- In durable plastic storage case



150.1650	10 pcs	Digital compression pressure test set for petrol engines	2.20
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consists of:

150.1650-1	Manometer digital	420
150.1650-10	Replacement seals and valve assortment	5
150.1650-2	Manometer analogue	120
150.1650-3	Adaptor tube M18 x 1,5	100
150.1650-4	Adaptor tube M14 x 1,25 long	90
150.1650-5	Adaptor tube M14 x 1,25 short	110
150.1650-6	Adaptor bush L=64 mm, M18 x 1,5	105
150.1650-7	Adaptor bush L=42 mm, M12 x 1,25	40
150.1650-8	Adaptor bush L=42 mm, M10 x 1,0	40
150.1650-9	Coupling 1/4" IG	80

Master fuel injection system pressure test set for petrol engines

- Ideal for quick and reliable pressure testing on all common injection systems of petrol engines
- For simple testing of fuel pumps, system pressure sensors and tightness
- Suitable for mechanical and electrical petrol injection systems
- For almost all common, European, Asian and American vehicle types
- Includes shock-proof, large precision manometer Ø 100.00 mm, 0 - 10 bar with rubber cover
- Includes shock-proof, small precision manometer Ø 75.00 mm, 0 - 1 bar especially for the central injection with rubber cover
- Compact quick couplings to all adaptors and hoses
- Replacement washers (20 pieces) are available in the set
- In durable plastic storage case

Application range / injection systems: Bosch K-Jetronic, Bosch L/LH-Jetronic, Bosch Motronic, Bosch Motronic-Jetronic, MPFI, TBI, Eci, MPI, EFI, EGI, PGM-Fi, DIGIFANT 1/2, CIS-Digital, Weber CFI, Spi, Singlepoint, Multipoint, Multec SPI, EFI, Simtec EFI, 1-Tec, Magent Marelli G5/G6 Mono, Weber-Marelli 1AW, CFI, Volkswagen 1AW, R Electronic etc.



150.2325	42 pcs	Master fuel injection system pressure test set for petrol engines	4.00
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consists of:

150.2326	1	A	Manometer Ø 100.0 mm, 0 - 10 bar with 1/4" quick coupling	360
150.2327	1	B	Manometer Ø 75.0 mm, 0 - 1 bar with 1/4" quick coupling	202
150.2328	2	GA	Adapter piece M14x1.5 internal thread and 1/4" hose connection	41
150.2329	2	GT	Adapter piece M16x1.5 internal thread and 1/4" hose connection	39
150.2340	1	GS	Double-sided adapter piece 5/8"x1.8 internal thread	28
150.2341	2	GV	Adapter piece 5/8"x1.8 external thread and 1/4" hose connection	26
150.2342	2	GU	Adapter piece M16x1.5 external thread and 1/4" hose connection with sealant ring	48
150.2343	2	GB	Adapter piece M14x1.5 external thread and 1/4" hose connection with sealant ring	39

consists of:

150.2344	1	GC	Connection adapter piece M14x1.5 external thread and 16 mm hexagon with sealant ring	37
150.2345	1	AE	Adapter piece (long) M8x1.0 external thread and 1/4" hose connection with sealant ring	70
150.2346	1	AB	Dual adapter piece M16x1.5 internal and external thread and 3/8" hose connection	65
150.2347	1	AA	Dual adapter piece M14x1.5 internal and external thread and 3/8" hose connection	65
150.2348	1	AI	Adapter piece M10x1.0 external thread and 1/4" hose connection with sealant ring	35
150.2349	1	AJ	Adapter piece M10x1.0 internal thread and 1/4" hose connection	21
150.2360	1	HO	Hollow bolt M8x1.0 and 1/4" hose connection	22
150.2361	1	HN	Hollow bolt M6x1.0 and 1/4" hose connection	19
150.2362	1	G	Manometer connection hose with 1/4" hose connection with valve for Bosch CSI and GM TBI systems	110
150.2363	1	W	Manometer connection hose with 1/4" hose connection for Ford EFI systems	324
150.2364	1	F	Manometer connection hose with 1/4" hose connection for universal use with 3/8" and 5/16" high-pressure hose connections	160
150.2365	1	C	Adapter hose for small Schrader valve 5/16"x32 UNF internal thread and 1/4" hose connection	95
150.2366	1	D	Manometer connection hose with 1/4" hose connection including pressure release valve, transparent hose	110
150.2367	1	E	Adapter hose for standard Schrader valve 7/16"x20 UNF internal thread and 1/4" hose connection	116
150.2368	1	X	Manometer 5/16" quick coupling connection hose with 1/4" hose connection for Ford EFI systems	40
150.2369	1	XA	Manometer 5/16" quick coupling connecting hose with 1/4" hose connection for GM TBI systems	55
150.2650	2	AM	Adapter piece M8x1.0 external thread and 1/4" hose connection with sealant ring	13
150.2651	2	AK	Adapter piece M12x1.5 internal thread and 1/4" hose connection	24
150.2652	1	AL	Adapter piece M8x1.0 internal thread and 1/4" hose connection	22
150.2653	1	AC	Dual adapter piece M14x1.25 internal and external thread and 1/4" hose connection	63
150.2654	1	AG	Adapter piece (long) M8x1.0 internal thread and 1/4" hose connection	64
150.2655	1	HA	Adapter piece (long) for 1/4", 3/8", 1/2" hoses and 1/4" hose connection	51
150.2656	1	HE	Hollow bolt M14x1.5 and 1/4" hose connection	28
150.2657	1	HR	Hollow bolt M12x1.5 and 1/4" hose connection	38
150.2658	1	HQ	Hollow bolt M12x1.25 and 1/4" hose connection	33
150.2659	1	HP	Hollow bolt M10x1.0 and 1/4" hose connection	29
150.2661	1		Replacement sealant ring packet 20 Pieces	10



THE BIGGEST SELECTION OF RATCHET- WRENCHES IN THE WORLD!

PERFECT TECHNOLOGY — THE AS YET UNEQUALLED
“INVENTOR OF THE RATCHET WRENCH”
WITH OVER 10,000,000 SATISFIED CUSTOMERS



Innovative ratchet technology from 5.5 mm to 41.00 mm!

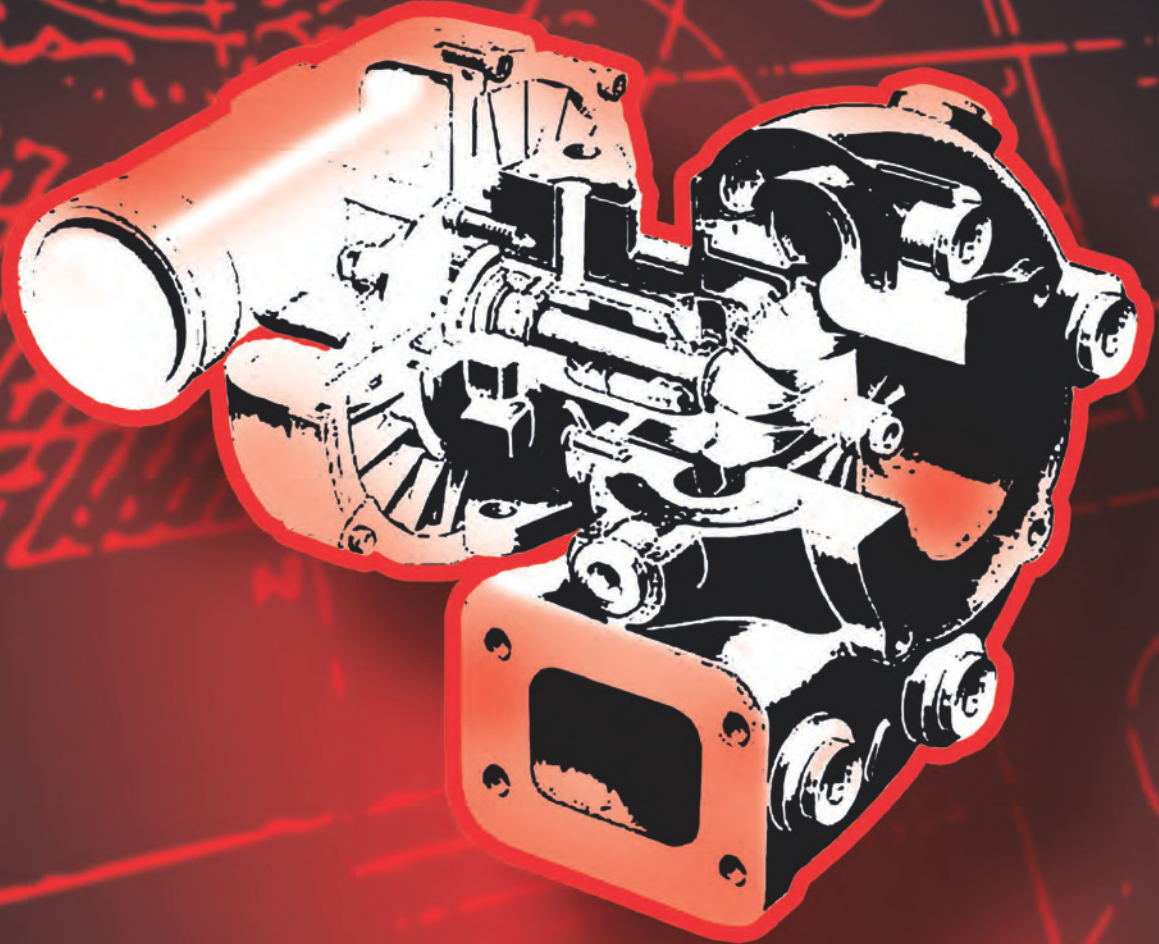


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ENGINE - TURBOCHARGER 01



Innovation is
our mission!



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HOSE CLAMP TOOL

ERGOTORQUE® socket screwdriver

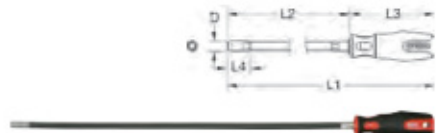
- 6 point
- Flexible
- Limited torque
- Double spiral shaft
- Plastic protective coating
- With hanging hole
- Chrome vanadium



	Ø mm	D mm	L1 mm	L2 mm	L3 mm	L4 mm	W mm
911.1126	6	10.8	259.0	150.0	109.0	9.3	155
911.1127	7	11.7	259.0	150.0	109.0	10.0	155
911.1128	8	11.9	259.0	150.0	109.0	10.0	155
911.1125	10	12.5	279.0	170.0	109.0	14.3	170

ERGOTORQUEplus® socket screwdriver, extra long

- Ideal for deep seated screw-hose clamps
- 6-point
- Flexible
- Limited torque
- Double spiral shaft
- Plastic protective coating
- With 2 component handle
- With suspension hole
- Chrome vanadium



	Ø mm	D mm	L1 mm	L2 mm	L3 mm	L4 mm	W mm
911.1175	5	11.9	614.0	500.0	114.0	8.9	270
911.1176	6	10.9	614.0	500.0	114.0	11.3	280
911.1177	7	11.7	614.0	500.0	114.0	11.3	280
911.1178	8	11.7	614.0	500.0	114.0	11.3	280

ERGOTORQUE® screwdriver set

- Flexible blade with double spiral shaft
- Limited torque
- Plastic protective coating
- Two component handle
- With hanging hole
- Contains also the most current 1/4" bits and sockets
- In display box



	Ø mm	W mm	
911.1180	16 pcs	ERGOTORQUE® screwdriver set	1.30
1 x	1/4"		
1 x	1/4"		
1 x	7 mm		
3 x	5 - 6 - 8 mm		
2 x	5.5 - 6.5 mm		
2 x	PH1 - PH2		
6 x	T10 - T15 - T20 - T25 - T27 - T30		

Hose clamp tension device

- For assembly and disassembly of hose clamps
- Easy to use
- Less space required
- Wear-resistant spindle drive
- Hand-wheel operation
- 6-point and 1/4" drive
- Chrome molybdenum



	Ø mm	Ø mm	Open width mm	W mm
115.0910	6-40	0-37	80	130
115.0911	6-65	0-62	105	160

Hose clamp gripping pliers

- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- Quick release lever
- Easy locking action
- For round and flat material
- Nickel plated
- Chrome vanadium



	Clamping range mm	L mm	W mm
115.1126	18-36	175.0	231
115.1127	18-54	230.0	420

Hose clamp gripping pliers set

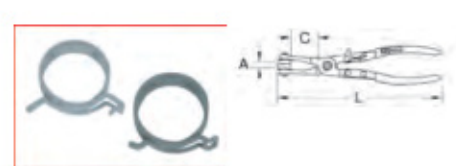
- Forged gripping jaws
- Serrated execution
- Size adjustment using the adjustment wheel
- Quick release lever
- Easy locking action
- For round and flat material
- Nickel plated
- Chrome vanadium



	W mm	
115.1125	2 pcs 175 - 230 mm	653

Hose clamp pliers, angled

- 45° angled head
- With variable jaws
- For difficult to reach clamps
- Includes locking mechanism
- With PVC dipped handle
- Chrome molybdenum



	A mm	C mm	L mm	W mm
115.1042	0-65	55.0	220.0	210

Hose clamp pliers, angled

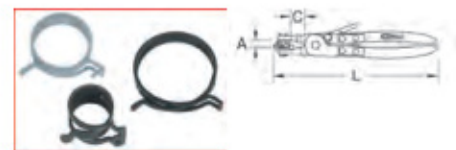
- 90° angled head
- With moveable jaws
- For difficult to reach spring clamps
- Includes locking mechanism
- With PVC dipped handle
- Chrome molybdenum



	Ø mm	A mm	L mm	W mm
115.1198	18-53	5-43	210.0	400

Universal hose clamp pliers

- Universal crown profile
- For difficult to reach clamps
- With PVC dipped handle
- Includes locking mechanism
- Versatile usage
- Chrome molybdenum



	A mm	C mm	L mm	W mm
115.1043	0-48.5	40.0	220.0	240

Hose clamp pliers

- Suitable for correct assembly and disassembly of spring clamps
- Turnable jaws
- Includes ratchet function
- Effortless opening and closing
- PVC dipped handle
- Special steel



	A mm	L mm	Weight
115.1167	15-56	275.0	400

Hose clamp pliers

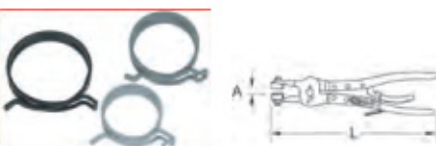
- PVC dipped handle
- For spring pipe clamps
- Includes locking mechanism and ratchet function
- Chrome molybdenum



	A mm	C mm	L mm	Weight
115.1046	0-45	37.0	220.0	230

Hose clamp pliers, angled

- Suitable for correct assembly and disassembly of spring clamps
- 110° angled
- Turnable jaws
- With locking device
- PVC dipped handle
- Special steel



	A mm	L mm	Weight
115.1173	6-58	250.0	400

Hose clamp pliers type MU1

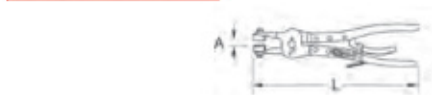
- For secure and correct dismantling and assembly of clamps
- Suitable for fitting and eccentric clamps
- Includes locking mechanism and ratchet function
- For difficult to reach clamps
- For new type and hard to access steel band clamps
- Special tool steel Suitable for VAG



	A mm	L mm	Weight
115.1062	0-30	235.0	390

Hose clamp pliers type MU2

- For secure and correct dismantling and assembly of clamps
- Suitable for fitting and eccentric clamps
- Includes locking mechanism and ratchet function
- For difficult to reach clamps
- For new type and hard to access steel band clamps
- Special tool steel Suitable for VAG 2.0 TDI / MC: BKD, Volkswagen Passat from 2005, Touran, Golf V, Skoda Octavia, Audi A3 etc.



	A mm	L mm	Weight
115.1063	0-40	295.0	470

Hose clamp pliers type MU2

- Suitable for correct assembly and disassembly of spring clamps
- Ideal for deep seated spring clamps
- Turnable jaws
- Includes ratchet function
- PVC dipped handle
- Special steel



	A mm	L mm	Weight
115.1166	4-45	290.0	440

Hose clamp pliers type MU3

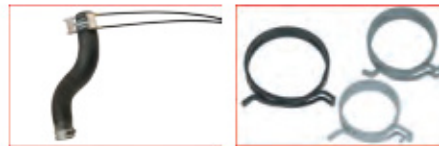
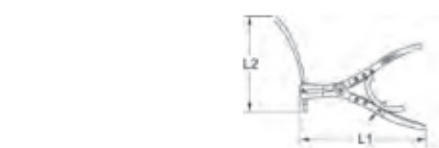
- For secure and correct dismantling and assembly of clamps
- Suitable for fitting and eccentric clamps
- With 600 mm bowden cable
- Adjustable length bowden cable
- Includes locking mechanism and ratchet function
- For difficult to reach clamps
- For new type and hard to access steel band clamps
- Special tool steel Suitable for VAG 2.0 TDI / MC: BKD, Volkswagen Passat from 2005, Touran, Golf V, Skoda Octavia, Audi A3.



	Q mm	L1 mm	L2 mm	Weight
115.1064	0-50	240.0	600.0	115.1066 540

Hose clamp pliers with double bowden cable

- PVC dipped handle
- For spring pipe clamps
- 600 mm bowden cable
- Adjustable length bowden cable
- Includes locking mechanism
- For difficult to reach clamps
- Special tool steel



	Q mm	L1 mm	L2 mm	Weight
115.1065	0-70	270.0	600.0	115.1065-1 540

Hose clamp pliers, VAG

- Suitable for assembly or disassembly of spring clamps with reducing ends
- With PVC dipped handle
- With 600 mm Bowden cable
- Includes ratchet function, locking mechanism and loosening lever
- Internal spring
- For difficult to reach spring clamps
- Chrome molybdenum

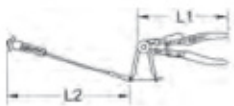
Application range: VAG 2.0 TDI engines (BKD), especially suitably for hard to reach lower coolant hose



	Ø mm	L1 mm	L2 mm	Wt. kg
115.1169	0 - 60	260.0	600.0	500

Hose clamp pliers with bowden cable

- With PVC dipped handle
- For spring pipe clamps
- With 650 mm Bowden cable
- Includes ratchet function, locking mechanism and loosening lever
- Internal spring
- For difficult to reach spring clamps
- Chrome molybdenum



	Ø mm	L1 mm	L2 mm	Wt. kg
115.1168	0 - 70	260.0	650.0	500

Hose clamp pliers with bowden cable

- Ideally suited for opening and closing hose clamps
- Suitable for hard to reach self-tensioning spring clamps
- With 590 mm strengthened Bowden cable
- Includes locking mechanism
- Internal spring
- The torsion of the pliers is reduced with strong clamps
- With quick change system for Bowden cable replacement
- 2 component handle
- Strengthened steel

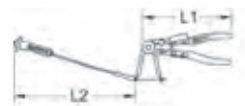
Application range: MUBEA and NORMA



	Ø mm	L1 mm	L2 mm	Wt. kg
115.0901	15 - 54	260.0	730.0	500

Hose clamp pliers with bowden cable

- For self-tensioning hose clamps
- With locking mechanism
- In particular for fuel lines, cooling and washing water hoses
- With 650 mm Bowden cable
- With flange attachment for spring clamps with flange adjoining ends
- Opening and closing the clamps without damage to the hose also in hard to reach places
- Self-opening
- With PVC dipped handle
- Special steel



	Ø mm	L1 mm	L2 mm	Wt. kg
115.1041	0 - 60	200.0	650.0	470

Spring band clamp pliers with gooseneck

- For actuation of self tensioning spring band clamps
- For cooling and heating systems
- Semi rigid, plastic coated gooseneck
- Convenient one handed operation in deep regions
- Fixing of the clamp by micro teeth
- Ideal for confined spaces
- Working head with raised grippers and wide opening
- Working head with slide guide and retraction spring
- With two component handle
- Chrome molybdenum

Application area: NORMA FBS, MUB FBS-STD, FBS-RSV, etc.



	Ø mm	L1 mm	L2 mm	Wt. kg
115.1190	18-54	220.0	660.0	620

Hose clamp pliers

- For the correct assembly and disassembly of spring clamps
- With 600 mm Bowden cable for hard to reach areas
- Step-less locking mechanism
- With quick-release lever
- Simple handling
- Special tool steel



	Ø mm	L1 mm	L2 mm	Wt. kg
115.1189	0-50	210.0	600.0	330

Automotive hose clamp pliers set

- Handle dip insulated
- Ideal for clamps low down in the engine
- Includes locking mechanism
- For self tensioning spring pipe clamps with 3 point mounting
- Self opening
- For opening and closing re/useable clic hose clamps, type Clic + Clic-R
- For difficult to reach clamps
- Special tool steel

Application area: For connecting and removing fuel, immersed ventilation, coolant, washer water and vacuum hoses, etc.

Application range: Volkswagen, Audi, Mercedes Benz, Toyota etc.



115.1104	4 pcs	Automotive hose clamp pliers set	1,12
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consists of:

115.1045	Hose clamp pliers (click type), 180mm	215	
115.1042	Hose clamp pliers (recessed/slot), 220mm	210	
115.1187	Hose clamp pliers with prism, 8-18mm	189	
115.1065	Hose clamp pliers (dbl bowden cable), 600mm	540	

Automotive hose clamp pliers set

- PVC dipped handle
- For opening and closing of cobra hose clamps
- Swivel pressed jaws
- Includes locking mechanism and ratchet function
- Self opening mechanism
- For the dismantling and assembly of hose clamps
- Includes bowden cable
- Chrome molybdenum



115.1055	7 pcs	Automotive hose clamp pliers set	4,00
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consists of:

115.1041	Hose clamp pliers (bowden cable), 650mm	470	
115.1042	Hose clamp pliers (recessed/slot), 220mm	210	
115.1043	Hose clamp pliers (crown profile), 220mm	240	
115.1044	Hose pliers, 195mm	190	
115.1045	Hose clamp pliers (click type), 180mm	215	
115.1046	Hose clamp pliers (recessed/slot), 220mm	230	
115.1047	Hose clamp pliers (dbl cross slot), 220mm	230	

Hose release pliers

- Suitable for releasing secured cooling hoses
- Securing screw for adjusting jaws
- Gentle on materials
- Lower power usage
- Simple operation
- Plastic handle
- Special steel

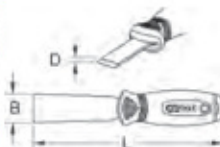


115.1199	180,0	15-54	180
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GASKET SCRAPER

STAINLESS STEEL Chisel scraper

- Ideal for removing stickers, seal and glue residues
- Also suitable for the removal and chiselling of plates or welding spots
- Heavy, continuous stainless steel blade that can be re-sharpened
- With reinforcement eyelet
- With hammer cap on the handle
- With ergonomic moulded two component handle
- Suitable for use at extremely low temperatures
- Extreme resistance to intergranular corrosion and oxidation
- Extremely long service life
- Autoclavable (heating of the tools to over 100°C to kill germs)
- Rust-proof and acid resistant
- Stainless steel



	B mm	D mm	L mm	
907.2211	32,0	1,2	190,0	160
907.2213	25,0	1,2	165,0	100
907.2212	32,0	2,5	190,0	160
907.2214	25,0	2,5	165,0	110

STAINLESS STEEL Chisel scraper set

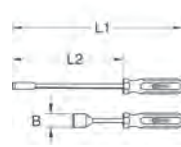
- Continuous stainless steel blade that can be re sharpened
- With reinforcement eyelet
- With hammer cap on the handle
- With ergonomic moulded two component handle
- Suitable for use at extremely low temperatures
- Extreme resistance to intergranular corrosion and oxidation
- Extremely long service life
- Autoclavable (heating of the tools to over 100°C to kill germs)
- Rust-proof and acid resistant
- Stainless steel



907.2210	4 pcs	32 x 1,2; 32 x 2,5; 25 x 1,2; 25 x 2,5 mm	580
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Gasket scraper

- Ideal for removing stickers, seal and glue residues
- Blades can be re-sharpened
- Blade 10° angled
- Extra-long design for hard to reach areas
- Also for removing extremely stubborn impurities and seal residue
- With ergonomic moulded one component handle



	B mm	L1 mm	L2 mm	
907.2231	12,5	200,0	100,0	120
907.2232	25,0	200,0	100,0	140
907.2233	12,5	300,0	200,0	180
907.2234	25,0	300,0	200,0	200

Gasket scraper set

- Ideal for removing stickers, seal and glue residues
- Blades can be re-sharpened
- Blade 10° angled
- Extra-long design for hard to reach areas
- Also for removing extremely stubborn impurities and seal residue
- With ergonomic moulded one component handle



907.2230	4 pcs	12,5 x 200; 25 x 200; 12,5 x 300; 25 x 300 mm	1,28
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SEALING RING HOOK TOOLS

Hook tool set

- Ideal for removing and use of O rings and seals
- Special steel



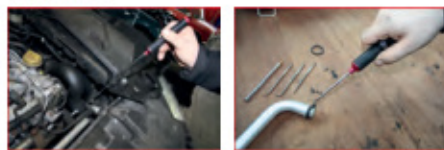
550.1040	2 pcs	Hook tool set	30
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consists of:

550.1041	Hook tool with double blade 90° short/ 180° short angled	11	
550.1042	Hook tool with double blade 45° long / 90° long	11	

Magnet and hook tool set

- Ideal for removing and inserting O-rings and seals
- With telescopic magnet attachment and replaceable hook
- Storage compartment in the handle for the various attachments
- Special steel



			9
550.1080	6 pcs	Magnet and hook tool set	70

consists of:

			9
550.1081		Basic unit	35
550.1082		Telescopic magnet attachment, 90 - 390 mm	13
550.1083		Hook attachment, straight, 75 mm	5
550.1084		Hook attachment, 90°, 75 mm	5
550.1085		Hook attachment, 120°, 75 mm	5
550.1086		Hook attachment, lateral bend, 75 mm	5

Hook tool set

- Ideal for removing and use of O rings and seals
- With one component handle
- With hanging hole
- Special steel



			9
550.1045	4 pcs	Hook tool set	120

consists of:

			9
550.1046		Hook tool 120mm blade, straight version	27
550.1047		Hook tool 120mm blade, 45° angled version	27
550.1048		Hook tool 120mm blade, 90° angled version	27
550.1049		Hook tool 120mm blade, 135° angled version	27

Master hook tool set

- Ideal for removing and use of O rings and seals
- With hanging hole
- Special steel



			9
550.1070	9 pcs	Master hook tool set	680

consists of:

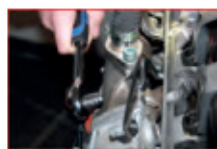
			9
550.1046		Hook tool 120mm blade, straight version	27
550.1047		Hook tool 120mm blade, 45° angled version	27
550.1048		Hook tool 120mm blade, 90° angled version	27
550.1049		Hook tool 120mm blade, 135° angled version	27
550.1071		Hook tool large, straight	91
550.1072		Hook tool large, 90° offset	105
550.1073		Hook tool large, sickle form	88
550.1074		T-handle hook tool, S-form small	42
550.1075		T-handle hook tool, S-form big	96

SPECIAL SPANNER AND ADAPTER

Turbo system wrench for VAG TDI

- Ideal for loosening difficult to access nuts when assembling and disassembling the turbocharger
- Higher twisting angle due to special shape compared to standard spanners
- Angled ring spanner specially adapted to tight spaces
- 12-point
- Special steel

Application range: VAG diesel engines with turbocharger



	Width mm	Depth mm	Length mm	9
150.2248	12	70	95.0	100

Turbocharger oil pressure adapter for DV6 engines

- Quick and accurate oil pressure testing directly on the turbocharger before and after turbocharger replacement
- High time and cost savings due to early identification of blocked oil screen
- Avoids complaints due to repeated turbocharger damage
- With quick coupling adapter
- Special steel

Application range: Ford Focus, Fiesta V, Fusion, Durateq-TD-Ci; Citroën C4, Xsara, C3, Berlingo; Peugeot 207, 307, 208, 207, 307; Volvo S40, V50, C30; BMW/Mini Cooper D, Mini Clubman, Mazda 3



	Length mm	9
150.1923	70.0	60

Oil pressure testing equipment

- Quick safe and problem free testing of the oil pressure on the engine
- incl. 10 adaptors
- Colour coding: Black = metric / silver = imperial
- Adaption with oil pressure sensor thread
- Manometer Ø 80 mm with rubber safety cover
- Flexible tube (L=1.3 m) with anti-kink device, decompression valve and quick coupling
- Robust execution
- In durable plastic storage case



			9
150.1920	12 pcs	Oil pressure testing equipment	1.89

			9
150.1921		Manometer with tube, 10 bar	594
150.1922		90° Adaptor angled	44
150.1920-1		Screw adaptor no 1, R1/8"	23
150.1920-10		Screw adaptor no 10, M18 x 1.5	34
150.1920-2		Screw adaptor no 2, 1/8" x 27 NPT	24
150.1920-3		Screw adaptor no 3, 1/4" x 18 NPT	33
150.1920-4		Screw adaptor no 4, 3/8" x 20 UNF	23
150.1920-5		Screw adaptor no 5, 1/2" x 20 UNF	27
150.1920-6		Screw adaptor no 6, M10 x 1.0	24
150.1920-7		Screw adaptor no 7, M12 x 1.5	24
150.1920-8		Screw adaptor no 8, M14 x 1.5	29
150.1920-9		Screw adaptor no 9, M16 x 1.5	33

VACUUM TESTING TOOLS

Automotive pressure and vacuum pump set

- For ventilating of smaller brake parts and for inspection of different areas including Low pressure and pressure functions
- Suitable for almost all current vehicles
- Robust metal execution
- Compact pistol form, one man operation
- Shock proof pressure and low pressure manometer with double scale
- Includes extensive adaptor assortment
- Readable in bar or psi
- In durable plastic storage case

Application range: Brake bleeding, test of the low pressure attitude the fuel pressure regulator, turbo charger valve, exhaust gas return valve and brake servos



Technical data:

Working range: vacuum up to -1 bar -30 Hg
pressure up to +1.5 bar 60 psi

			9
150.1900	7 pcs	Automotive pressure and vacuum pump set	1.80

consists of:

			9
150.1901		Pressure and vacuum pump	730
150.1902		Receiver / measuring beaker, 120ml	44
150.1903		Supply / measuring beaker, 120ml, with screw cap	44
150.1904		Adaptor set, 14 pcs.	15
150.1905		Connection hose and suction cap set, 5 pcs	23
150.1906		Coupling nozzle set, 4 pcs (6x6 / 6x6 / 6x8 / 6x10)	9
150.1907		Connection hose set, 2 pcs, L = 600 mm, Ø 6 x 9 mm	45

PRESSURE TESTING TOOLS

Turbocharger charged air system inlet test adapter, 2 stages

- Inlet adapter for closing the charged air system
- For passenger car and commercial vehicle turbo engines, diesel and petrol
- Allows rapid diagnosis by pressure testing the charged air system with hose internal diameters 31.0 - 110.0 mm when fi ted
- Time-saving and professional testing of leaking charged air cooler and hidden cracks in the charged air hoses
- Also for checking the tightness of the AGR valve
- Suitable for all current hoses on the charged air system that are not fi ted with a bayonet connector using the multi-stage offset adapter
- In the event of pressure loss, the leak can be quickly and simply localised by scanning the part or using leak spray
- Can be used together with compatible counter stopper adapters and air inlet system adapters and in combination with a conventional tyre infl tor



150.2521	2-stage inlet adapter, 31 x 38 mm	80
150.2522	2-stage inlet adapter, 46 x 51 mm	120
150.2523	2-stage inlet adapter, 55 x 60 mm	160
150.2524	2-stage inlet adapter, 65 x 70 mm	200
150.2525	2-stage inlet adapter, 75 x 80 mm	220
150.2526	2-stage inlet adapter, 85 x 90 mm	260
150.2527	2-stage inlet adapter, 95 x 100 mm	300
150.2528	2-stage inlet adapter, 105 x 110 mm	340

Turbocharger charged air system counter stoppers, 2 stages

- Counter stoppers for closing the charged air system
- For passenger car and commercial vehicle turbo engines, diesel and petrol
- Allows rapid diagnosis by pressure testing the charged air system with hose internal diameters 31.0 - 110.0 mm when fi ted
- Time-saving and professional testing of leaking charged air cooler and hidden cracks in the charged air hoses
- Also for checking the tightness of the AGR valve
- Suitable for all current hoses on the charged air system that are not fi ted with a bayonet connector using the multi-stage offset adapter
- In the event of pressure loss, the leak can be quickly and simply localised by scanning the part or using leak spray
- Can be used together with compatible inlet test adapters and air inlet system adapters and in combination with a conventional tyre infl tor



150.2529	2-stage counter-stopper adapter, 31 x 38 mm	100
150.2530	2-stage counter-stopper adapter, 46 x 51 mm	140
150.2531	2-stage counter-stopper adapter, 55 x 60 mm	160
150.2532	2-stage counter-stopper adapter, 65 x 70 mm	200
150.2533	2-stage counter-stopper adapter, 75 x 80 mm	240
150.2534	2-stage counter-stopper adapter, 85 x 90 mm	260
150.2535	2-stage counter-stopper adapter, 95 x 100 mm	300



Turbocharger charged air system air inlet adapter with hose

- Suitable for 2-stage turbocharger charged air system test adapter
- For passenger car and commercial vehicle turbo engines, diesel and petrol
- Time-saving and professional testing of leaking charged air cooler and hidden cracks in the charged air hoses
- Also for checking the tightness of the AGR valve
- In the event of pressure loss, the leak can be quickly and simply localised by scanning the part or using leak spray
- With integrated overpressure safety valve - opens at max. 1.8 bar
- The pressure gauge on the tyre infl tor also indicates pressure loss
- Can be used together with an inlet test adapter and counter stopper and in combination with a conventional tyre infl tor



	L mm	
150.1894	360.0	120

Turbo system pressure tester kit with stepped adaptor

- For passenger car and commercial vehicle turbo engines, diesel and petrol
- Allows rapid diagnosis by pressure testing the charged air system with hose internal diameters 31.0 - 110.0 mm when fi ted
- Time-saving and professional testing of leaking charged air cooler and hidden cracks in the charged air hoses
- Also for checking the tightness of the AGR valve
- Suitable for all current hoses on the charged air system that are not fi ted with a bayonet connector using the multi-stage offset adapter
- In the event of pressure loss, the leak can be quickly and simply localised by scanning the part or using leak spray
- With integrated overpressure safety valve - opens at max. 1.8 bar
- Can be used in conjunction with conventional tyre infl tors
- The pressure gauge on the tyre infl tor also indicates pressure loss
- In durable plastic storage case

Application range: Charged air systems for passenger cars and commercial vehicles



150.2520	17 pcs Turbo system pressure tester kit with stepped adaptor	4.00

consists of:

150.2521	2-stage inlet adapter, 31 x 38 mm	80
150.2522	2-stage inlet adapter, 46 x 51 mm	120
150.2523	2-stage inlet adapter, 55 x 60 mm	160
150.2524	2-stage inlet adapter, 65 x 70 mm	200
150.2525	2-stage inlet adapter, 75 x 80 mm	220
150.2526	2-stage inlet adapter, 85 x 90 mm	260
150.2527	2-stage inlet adapter, 95 x 100 mm	300
150.2528	2-stage inlet adapter, 105 x 110 mm	340
150.2529	2-stage counter-stopper adapter, 31 x 38 mm	100
150.2530	2-stage counter-stopper adapter, 46 x 51 mm	140
150.2531	2-stage counter-stopper adapter, 55 x 60 mm	160
150.2532	2-stage counter-stopper adapter, 65 x 70 mm	200
150.2533	2-stage counter-stopper adapter, 75 x 80 mm	240
150.2534	2-stage counter-stopper adapter, 85 x 90 mm	260
150.2535	2-stage counter-stopper adapter, 95 x 100 mm	300
150.2536	2-stage counter-stopper adapter, 105 x 110 mm	340
150.1894	Universal air inlet system adapter with hose	120



Turbocharger charged air system inlet test adapter, bayonet

- Inlet adapter for closing the charged air system
- For passenger car and commercial vehicle turbo engines, diesel and petrol
- Allows rapid diagnosis by pressure testing the charged air system with bayonet connector diameters 31.0 - 61.0 mm when fi ted
- Time-saving and professional testing of leaking charged air cooler and hidden cracks in the charged air hoses
- Also for checking the tightness of the AGR valve
- Suitable for all current hoses on the charged air system that are fi ted with a bayonet connector
- In the event of pressure loss, the leak can be quickly and simply localised by scanning the part or using leak spray
- Can be used together with compatible counter stopper adapters and air inlet system adapters and in combination with a conventional tyre infl tor



150.1826	Bayonet inlet adapter, Ø 31 mm	80
150.1827	Bayonet inlet adapter, Ø 38 mm	85
150.1828	Bayonet inlet adapter, Ø 45 mm	90
150.1829	Bayonet inlet adapter, Ø 51 mm	95
150.1831	Bayonet inlet adapter, Ø 56 mm	100
150.1832	Bayonet inlet adapter, Ø 61 mm	105



Turbocharger charged air system counter stoppers, bayonet

- Counter stoppers for closing the charged air system
- For passenger car and commercial vehicle turbo engines, diesel and petrol
- Allows rapid diagnosis by pressure testing the charged air system with bayonet connector diameters 31.0 - 61.0 mm when fitted
- Time-saving and professional testing of leaking charged air cooler and hidden cracks in the charged air hoses
- Also for checking the tightness of the AGR valve
- Suitable for all current hoses on the charged air system that are fitted with a bayonet connector
- In the event of pressure loss, the leak can be quickly and simply localised by scanning the part or using leak spray
- Can be used together with compatible inlet test adapters and air inlet system adapters and in combination with a conventional tyre inflator



Part No.	Description	Length (mm)	Weight (g)
150.1833	Bayonet counter stopper adapter, Ø 31 mm	60	
150.1834	Bayonet counter stopper adapter, Ø 38 mm	65	
150.1843	Bayonet counter stopper adapter, Ø 46 mm	70	
150.1844	Bayonet counter stopper adapter, Ø 51 mm	75	
150.1876	Bayonet counter stopper adapter, Ø 56 mm	80	
150.1877	Bayonet counter stopper adapter, Ø 61 mm	85	

Turbocharger charged air system air inlet adapter with hose

- Compatible with the bayonet turbocharger charged air system test adapter
- For passenger car and commercial vehicle turbo engines, diesel and petrol
- Time-saving and professional testing of leaking charged air cooler and hidden cracks in the charged air hoses
- Also for checking the tightness of the AGR valve
- In the event of pressure loss, the leak can be quickly and simply localised by scanning the part or using leak spray
- With integrated overpressure safety valve - opens at max. 1.8 bar
- The pressure gauge on the tyre inflator also indicates pressure loss
- Can be used together with an inlet test adapter and counter stopper and in combination with a conventional tyre inflator



Part No.	Total length (mm)	Weight (g)
150.1896	360.0	120

Turbo system pressure tester kit with bayonet adaptor

- For charged passenger car engines, diesel and petrol
- Allows rapid diagnosis by pressure testing the charged air system with bayonet connector diameters 31.0 - 61.0 mm
- Time-saving and professional testing of leaking charged air cooler and hidden cracks in the charged air hoses
- Also for checking the tightness of the AGR valve
- Suitable for all current hoses on the charged air system that are fitted with a bayonet connector
- In the event of pressure loss, the leak can be quickly and simply localised by scanning the part or using leak spray
- With integrated overpressure safety valve - opens at max. 1.8 bar
- Can be used in conjunction with conventional tyre inflators
- The pressure gauge on the tyre inflator also indicates pressure loss
- In durable plastic storage case

Application range: Charged air systems for passenger cars



Part No.	Description	Weight (g)
150.1825	13 pcs Turbo system pressure tester kit with bayonet adaptor	2.56

consists of:

Part No.	Description	Weight (g)
150.1826	Bayonet inlet adapter, Ø 31 mm	80
150.1827	Bayonet inlet adapter, Ø 38 mm	85
150.1828	Bayonet inlet adapter, Ø 46 mm	90
150.1829	Bayonet inlet adapter, Ø 51 mm	95
150.1831	Bayonet inlet adapter, Ø 56 mm	100
150.1832	Bayonet inlet adapter, Ø 61 mm	105
150.1833	Bayonet counter stopper adapter, Ø 31 mm	60
150.1834	Bayonet counter stopper adapter, Ø 38 mm	65
150.1843	Bayonet counter stopper adapter, Ø 46 mm	70
150.1844	Bayonet counter stopper adapter, Ø 51 mm	75
150.1876	Bayonet counter stopper adapter, Ø 56 mm	80
150.1877	Bayonet counter stopper adapter, Ø 61 mm	85
150.1896	Universal air inlet system adapter with hose	120



TESTING ACCESSORIES

Tyre filli g gauge

- For one hand operation
- Rubber coated manometer
- Manometer with bar and psi scale
- Filling lever and pressure release button
- Tube with integrated locking male nipple
- Robust rubber coated housing



Technical data:

Working range:	0 - 11 bar
	9 - 160 psi
Tube length:	490 mm
Operating pressure:	max 6,3 bar (90 psi)
Connection thread:	1/4"PT

Part No.	Total length (mm)	Weight (g)
515.1950	530.0	600

Tyre filli g gauge

- For one hand operation
- With rubber coated manometer
- Manometer with bar and psi scale
- With filli g lever and pressure release button
- Tube with integrated locking male nipple
- Robust rubber coated housing



Technical data:

Working range:	0 - 15 bar
	0 - 220 psi
Tube length:	350 mm
Operating pressure:	11 bar (160 psi)
Connection thread:	1/4"PT

Part No.	Total length (mm)	Weight (g)
515.1905	500.0	120

YOUR POWERFUL PARTNER FOR HYBRID AND ELECTRIC VEHICLE EXPERTS!

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The KS Tools specialist tools for hybrid and electric vehicles are manufactured to the most recent and international regulations from high-quality materials and offer maximum protection for every user!



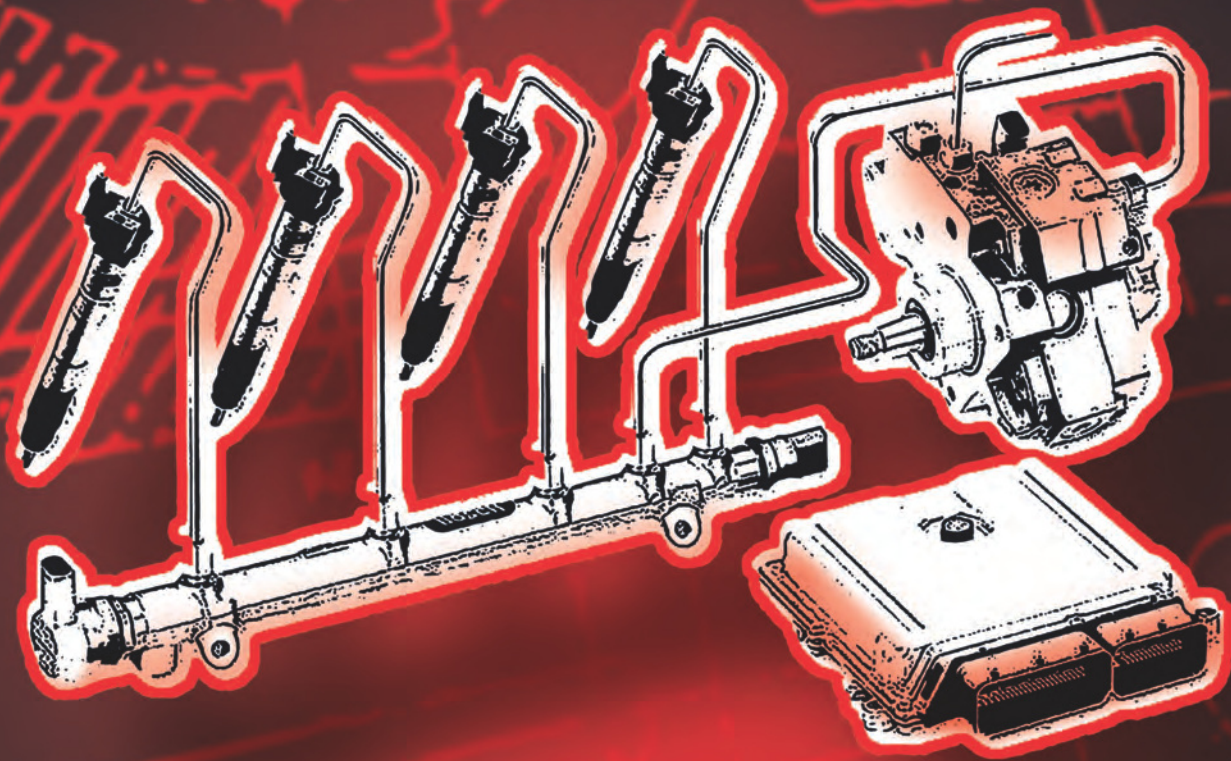
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Innovation is our mission!



ENGINE - FUEL INJECTION SYSTEM



Innovation is
our mission!



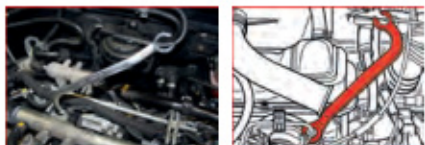
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FUEL INJECTOR RAIL WRENCH

Double open ring injection spanner

- Special length and design
- For the assembly and disassembly of hard-to-reach injection pipes
- Makes possible simple and time-saving work
- Wrench has single-sided head
- Open 12-point
- Matt finish
- Chrome vanadium

Application range: Audi, Volkswagen, Škoda, etc. e.g. for 1.6 l 4 cyl., 2.0 l 5 cyl., 2.4 l 6 cyl. diesel engines



	mm	L mm	kg
517.0057	17x17	220.0	140



T-handle box wrench

- 6 point
- T-handle
- Matt finish
- Chrome vanadium



	mm	L mm	B mm	kg
517.1181	8,0	300,0	200,0	310
517.1182	9,0	300,0	200,0	300
517.1183	10,0	300,0	200,0	310
517.1184	11,0	300,0	200,0	320
517.1185	12,0	300,0	200,0	320
517.1186	13,0	300,0	200,0	330
517.1187	14,0	300,0	200,0	310

T-handle box wrench set

- 6 point
- T-handle
- Matt finish
- Chrome vanadium



	kg
517.1180 7 pcs T-handle box wrench set	2.50

consists of:

	kg
517.1181 T-handle box wrench, 8mm	310
517.1182 T-handle box wrench, 9mm	300
517.1183 T-handle box wrench, 10mm	310
517.1184 T-handle box wrench, 11mm	320
517.1185 T-handle box wrench, 12mm	320
517.1186 T-handle box wrench, 13mm	330
517.1187 T-handle box wrench, 14mm	310

Injector pipe wrench

- 12-point
- For screw fitting to injection pipes
- Chrome plated and mirror polished
- Chrome vanadium

Application range: Mercedes 100, 130, 314, 360, 360h, 352A, 346/355, 401, 402, 403, 407h, 615, 616, 617

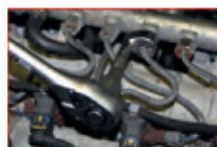


	mm	Length mm	kg
152.1401	17,0	80,0	150

Open box head spanner

- 12-point
- Internal square drive to DIN 3120/ISO 1174 with ball reception
- Special length and design
- For almost all common vehicle types
- For the assembly and disassembly of hard-to-reach injection pipes
- Makes possible simple and time-saving work
- With opening
- Special steel

Application range: Audi, BMW, Chrysler, Ford Opel, Mercedes, etc.

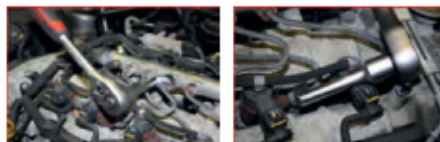


	mm	L mm	kg
913.1211	12	100.0	122
913.1212	14	100.0	129
913.1213	16	100.0	146
913.1214	17	100.0	140
913.1215	18	100.0	145
913.1216	19	100.0	147

Open box head spanner set

- 12-point
- Internal square drive to DIN 3120/ISO 1174 with ball reception
- Special length and design
- For almost all common vehicle types
- For the assembly and disassembly of hard-to-reach injection pipes
- Makes possible simple and time-saving work
- With opening
- Special steel
- In durable plastic storage case

Application range: Audi, BMW, Chrysler, Ford Opel, Mercedes, etc.



	kg
913.1210 6 pcs 12 - 14 - 16 - 17 - 18 - 19 mm	1.13

consists of:

	kg
913.1211 Open box head spanner, 10mm	122
913.1212 Open box head spanner, 14mm	129
913.1213 Open box head spanner, 16mm	146
913.1214 Open box head spanner, 17mm	140
913.1215 Open box head spanner, 18mm	145
913.1216 Open box head spanner, 19mm	147

Injector-socket

- 12-point
- Ideal for assembly and disassembly of injectors
- Internal square to DIN 3120/ISO 1174 with ball reception
- For manual operation
- Matt finish
- Chrome vanadium

Application range: Volkswagen Polo 1.3 l Diesel-Motor, Nissan Terrano TD 25, 27 from 1988



	mm	D1 mm	D2 mm	L mm	kg
150.2311	22	31.0	25.0	85.0	170

Injector-socket

- 12-point
- Ideal for assembly and disassembly of injectors
- Internal square to DIN 3120/ISO 1174 with ball reception
- For manual operation
- Matt finish
- Chrome vanadium

Application range: for diesel engines Volkswagen, Audi, Mercedes, Opel, Ford, Peugeot, Volvo, Toyota, Mazda, Nissan, Mitsubishi, Daihatsu, etc.



150.2312	mm	D1 mm	D2 mm	L mm	kg
	27	37.0	30.0	85.0	260

Injector-socket

- 6-point
- Ideal for assembly and disassembly of injectors
- With side window and opening for connection to nozzle head (E-connection)
- Internal square to DIN 3120/ISO 1174 with ball reception
- For manual operation
- Burnished
- Special steel

Application range: 2.0 l DW 10 HDI engines, etc.



150.2307	mm	Ø mm	mm	L mm	kg
	27	38.0	22.0	100.0	280

Injector-socket set

- 6-point
- Ideal for assembly and disassembly of injectors
- With side window and opening for connection to nozzle head (E-connection)
- Internal square to DIN 3120/ISO 1174 with ball reception
- For manual operation
- Burnished
- Special steel
- In durable plastic storage case



150.2310	4 pcs	Injector-socket set	kg
			1.56

consists of:

		kg
150.2391	1/2" injector nozzle socket, 25.0 mm	300
150.2307	1/2" injector nozzle socket, 27.0 mm	280
150.2308	1/2" injector nozzle socket, 29.0 mm	340
150.2309	1/2" injector nozzle socket, 30.0 mm	360

Injector-socket

- 6-point
- Ideal for assembly and disassembly of injectors
- Internal square to DIN 3120/ISO 1174 with ball reception
- For manual operation
- Matt finish
- Chrome vanadium

Application range: for diesel engines Volkswagen, Audi, Mercedes, Opel, Ford, Peugeot, Volvo, Toyota, Mazda, Nissan, Mitsubishi, Daihatsu, etc.



150.2314	mm	D1 mm	D2 mm	L mm	kg
	27	35.3	36.7	110.0	260

Injector-socket

- 6-point
- Ideal for assembly and disassembly of injectors
- With side window and opening for connection to nozzle head (E-connection)
- Internal square to DIN 3120/ISO 1174 with ball reception
- For manual operation
- Burnished
- Special steel

Application range: DCI and HDI engines, etc.



150.2308	mm	Ø mm	mm	L mm	kg
	29	42.0	22.0	100.0	340

Injector-socket

- 6-point
- Ideal for assembly and disassembly of injectors
- With side window and opening for connection to nozzle head (E-connection)
- Internal square to DIN 3120/ISO 1174 with ball reception
- For manual operation
- Burnished
- Special steel

Application range: PSA, Ford, Toyota



150.2391	mm	Ø mm	mm	L mm	kg
	25	37.0	22.0	100.0	300

Injector-socket

- 6-point
- Ideal for assembly and disassembly of injectors
- With side window and opening for connection to nozzle head (E-connection)
- Internal square to DIN 3120/ISO 1174 with ball reception
- For manual operation
- Burnished
- Special steel

Application range: Renault, Nissan, 1.9 l F9Q engines, etc.



150.2309	mm	Ø mm	mm	L mm	kg
	30	43.0	22.0	100.0	360

Injector-socket

- 12-point
- Ideal for assembly and disassembly of injectors
- Internal square to DIN 3120/ISO 1174 with ball reception
- With a side window for guiding the cable of the motion sensor and the return pipe
- For manual operation
- Phosphate
- Chrome molybdenum

Application range: Ford Mondeo from 10/2000 - 02/2007, 2.0 DI, -TDCI, -TDDI, 2.2 TDCI; Ford Transit from 01.2000 - 05/2006, 2.0 DI, -TDCI and 2.4 DI, -TDCI



150.9541	mm	D1 mm	D2 mm	L mm	kg
	21	32.0	34.0	90.0	300

Injector-socket

- 12-point
- Ideal for assembly and disassembly of injectors
- Internal square to DIN 3120/ISO 1174 with ball reception
- With a side window for guiding the cable of the motion sensor and the return pipe
- For manual operation
- Burnished
- Special steel

Application range: Alfa Romeo, Chrysler, Rover, MAN 2.5TD



	mm	D1 mm	D2 mm	L mm	
150.2322	28	40.0	33.0	78.0	280

Diesel injector socket

- 6-point
- Special socket key for dismantling and assembly of injectors
- Correct easy and damage free usage
- Internal square to DIN 3120 / ISO 1174 with ball reception
- Ideally suited for commercial vehicles, light commercial, SUV, etc
- Black, tempered surface
- Special steel

Application range: Mercedes Benz, Motor 604 / 605 / 606



	mm	L mm	
455.0034	22	110.0	250

Diesel injector socket

- 12-point
- Special socket key for dismantling and assembly of injectors
- Correct easy and damage free usage
- Internal square to DIN 3120 / ISO 1174 with ball reception
- Ideally suited for commercial vehicles, light commercial, SUV, etc
- Black, tempered surface
- Special steel

Application range: Mercedes Benz Actros, Motor 457 / 541 / 542, Ford Maverik 2,7 TDI, Nissan Terrano TD 2,5L / 2,7L, Opel Corsa 1,5D / 1,7 TD, Isuzu



	mm	L mm	
455.0033	22	80.0	250

Diesel injector socket

- 12-point
- Special socket key for dismantling and assembly of injectors
- Correct easy and damage free usage
- Internal square to DIN 3120 / ISO 1174 with ball reception
- Ideally suited for commercial vehicles, light commercial, SUV, etc
- Black, tempered surface
- Special steel

Application range: Suitable for diesel engines from Fiat, Ford, Mercedes Benz and Volkswagen (vans and passenger cars), MAN 2,5 TD

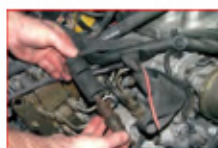


	mm	L mm	
455.0032	27	78.0	250

Diesel injector socket

- 12-point
- Special socket key for dismantling and assembly of injectors
- Correct easy and damage free usage
- Internal square to DIN 3120 / ISO 1174 with ball reception
- Ideally suited for commercial vehicles, light commercial, SUV, etc
- Black, tempered surface
- Special steel

Application range: MAN 6 cylinder in line D 0226, Chrysler Voyager, Jeep Cherokee, Opel Frontera VM 41 B, Rover, Landrover Discovery Motor VM 2,5L TD



	mm	L mm	
455.0031	28	78.0	250

Diesel injector socket set

- Special socket key for dismantling and assembly of injectors
- Correct easy and damage free usage
- Internal square to DIN 3120 / ISO 1174 with ball reception
- Ideally suited for commercial vehicles, light commercial, SUV, etc
- Black, tempered surface
- Special steel
- In durable plastic storage case

Application range: MAN, Mercedes Benz Transporter and commercial vehicles, Opel, Fiat, Volkswagen, Ford, Nissan, etc.



455.0030	4 pcs Diesel injector socket set 1.10

consists of:

455.0031	1/2" Diesel injector socket 12 point, 28mm	250
455.0032	1/2" Diesel injector socket 12 point, 27mm	250
455.0033	1/2" Diesel injector socket 12 point, 22mm	250
455.0034	1/2" Diesel injector socket 6 point, 22mm	250

Injector-socket with bore hole

- Hexagon socket with bore hole
- Ideal for assembly and disassembly of Common Rail couplings
- Internal square to DIN 3120/ISO 1174 with ball reception
- For manual operation
- Chrome plated and mirror polished
- Chrome vanadium

Application range: Bosch injectors in DCI and HDI engines, etc.



	mm	D mm	L mm	T mm	
152.1057	10	22.0	75.0	35.0	100

Injector socket

- 6-point
- Ideal for assembly and disassembly of injectors
- With side window and opening for connection to nozzle head (E-connection)
- Internal square to DIN 3120/ISO 1174 with ball reception
- External drive hexagonal socket 22.0 mm
- For manual operation
- Burnished
- Special steel

Application range: PSA, Ford, Toyota

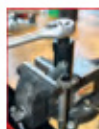


	mm	\varnothing mm	Hexagon mm	
152.1195	25.0	37.0	100.0	270

Injector socket

- 6-point
- Ideal for assembly and disassembly of injectors
- With side window and opening for connection to nozzle head (E-connection)
- Internal square to DIN 3120/ISO 1174 with ball reception
- External drive hexagonal socket 22.0 mm
- For manual operation
- Burnished
- Special steel

Application range: 2.0 l DW 10 HDI engines, etc.

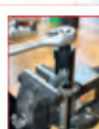


	mm	mm	Total length mm	kg
152.1196	27,0	38,0	100,0	270

Injector socket

- 6-point
- Ideal for assembly and disassembly of injectors
- With side window and opening for connection to nozzle head (E-connection)
- Internal square to DIN 3120/ISO 1174 with ball reception
- External drive hexagonal socket 22.0 mm
- For manual operation
- Burnished
- Special steel

Application range: Renault, Nissan, 1.9 l F9Q engines, etc.



	mm	mm	Total length mm	kg
152.1198	30,0	43,0	100,0	358

Crows foot spanner

- With internal square drive
- For tightening and loosening pipe connections
- For manual operation
- For hard-to-access areas
- Burnished
- Special steel



	mm	kg
913.1329	36	275
913.1330	41	392
913.1331	46	390

Injector socket

- 6-point
- Ideal for assembly and disassembly of injectors
- With side window and opening for connection to nozzle head (E-connection)
- Internal square to DIN 3120/ISO 1174 with ball reception
- Opened design
- For damage-free assembly and disassembly
- Tempered surface
- Special steel

Application range: Mercedes A- and B-Class, Fiat 1.3MJ



	mm	mm	Total length mm	kg
152.1058	29,0	42,0	78,0	274

Crows foot spanner

- 6-point
- With internal square drive
- For tightening and loosening pipe connections
- For manual operation
- Slim design
- For hard-to-access areas
- Burnished
- Special steel



	mm	kg
913.1321	17	72
913.1322	18	74
913.1323	19	75

PRE-COMBUSTION CHAMBER SOCKET WRENCH

Special tooth socket for pre chamber

- Ideal for removing the diesel pre-combustion chamber sealing ring nuts
- Internal square to DIN 3120/ISO 1174 with ball reception
- With 58 notched teeth
- Phosphate
- Special steel

Application range: Mercedes engines OM 601, OM602, OM603, OM604, OM605 and OM606

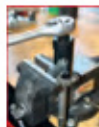


	No. teeth	L mm	kg
455.0005	58	60,0	215

Injector socket

- 6-point
- Ideal for assembly and disassembly of injectors
- With side window and opening for connection to nozzle head (E-connection)
- Internal square to DIN 3120/ISO 1174 with ball reception
- External drive hexagonal socket 22.0 mm
- For manual operation
- Burnished
- Special steel

Application range: Mercedes A- and B-Class, Fiat 1.3MJ



	mm	mm	Total length mm	kg
152.1197	29,0	42,0	100,0	342

Crows foot spanner

- 6-point
- With internal square drive
- For tightening and loosening pipe connections
- For manual operation
- Slim design
- For hard-to-access areas
- Burnished
- Special steel



	mm	kg
913.1324	22	109
913.1325	24	127
913.1326	27	135
913.1327	30	163
913.1328	32	181

Pin wrench for pre-chamber

- Ideal for removing the diesel pre-combustion chamber sealing ring nuts
- Internal square to DIN 3120/ISO 1174 with ball reception
- Includes screw
- Phosphate
- Special steel

Application range: Mercedes engines OM 615, OM616 and OM617



	Length mm	kg
455.0006	65,0	280

Impact extractor for pre-chamber

- Ideal for removing trapped diesel pre-combustion chambers
- Robust design
- Enables short and intensive impact through impact weight
- Includes impact weight, adapter and tension bolts
- Special steel

Application range: Mercedes engines OM615, OM616, OM617, OM601, OM602, OM603, OM604, OM605 and OM606



			ID
150.2510	6 pcs	Impact extractor for pre-chamber	3.76

consists of:

			ID
150.2511	Connecting rod	460	
150.2512	Impact weight of 2.4 kg	2400	
150.2513	Nut M14	20	
150.2514	T-handle	400	
150.2515	M14 to M12 adapter	100	
150.2516	Tension bolts for Mercedes pre-chamber	360	

INSPECTION AND TEST TOOLS

Common rail injector test assortment with 8 measurement pipes

- Professional test assortment to the misdiagnosis through measurement of the return stroke quantities of high pressure injectors
- Measurement of up to 8 high pressures injectors simultaneously possible
- Ideal supplement to the engine diagnosis device
- Diesel suitable silicone tubes
- Tube end with coupling and original adapter for safe connection
- Double sealed brass connections in the test tube
- Stable acrylic test block with filling line scale
- Precise measurement result through 25 ml volumetric capacity in the test tube
- In durable plastic storage case

Application range: Mercedes, BMW, Ford, Renault, Opel, Vauxhall, Toyota, Nissan, Citroen, Volvo, Peugeot etc.



			ID
150.1580	65 pcs	Common rail injector test assortment with 8 measurement pipes	3.16

consists of:

			ID
X			
150.1581	1	Acrylic-Block	800
150.1582	8	Silicone tube 5,2 x 8,8 x 600 mm	40
150.1584	8	Adapter to acrylic block with O ring	24
150.1594	8	Adapter for Bosch	10
150.1595	8	Adapter for Siemens	10
150.1596	8	Adapter for Denso	10
150.1597	8	Adapter for Delphi	10
150.1598	8	Double nipple Adaptor for Bosch	30
150.1599	8	Fast fastener coupling	30

Plastic pipe with adapter

- Fitted directly on the injector
- Perfect supplement to set 150.1580



			ID
150.1571	Length 165.0	18	

Cylinder leak detector tester set

- For diagnosis of compression pressure loss
- Suitable for analysing inlet and outlet valves, piston rings or cylinder liner, cylinder head or head seal
- Better alternative for compression measurement
- Universal usage
- Integrated pressure reducer
- Necessary working pressure: 1.0 bar
- For use on engines at operating temperature
- In durable plastic storage case

Test results:

Outlet valves not tight:

Air noises in exhaust, manifold and cylinder head on the outlet side

Inlet valves not tight:

Air noises in intake, on cylinder head on the inlet side

Piston rings, pistons, cylinder bore damaged:

Air noises on the crankcase breather or on the dipstick

Cylinder head seal defective:

Air noises in the adjacent cylinder, spark plug bore

Cylinder head seal defective or tear in cylinder head

Air noises or bubble formation in the cooling system or reservoir



			ID
150.1780	9 pcs	Cylinder leak detector tester set	2.30

consists of:

			ID
150.1781	Test device with dual display: Input pressure 0-7 bar + pressure loss display 0-100%	570	
150.1782	Hose 14/18 mm	132	
150.1783	House with adaptor	108	
150.1784	Adaptor M10 x 1.0 mm	280	
150.1785	Adaptor M12 x 1.25 mm	310	
150.1786	Adaptor M14 x 1.25 mm	330	
150.1787	Adaptor M14 x 1.25 mm, long design	550	
150.1788	Spark plug adaptor M12 x 1.25 mm	251	
150.1789	Spark plug adaptor M14 x 1.25 mm	255	

Compression pressure test instrument for diesel engines

- Complete test tool set with or without direct injection
- Compact adaptor pieces with quick couplings
- Includes extensive adaptor assortment
- Very flexible tube for hard to access places
- In durable plastic storage case



Technical data:

Manometer: 0,0-70,0 bar
 Tube length: 355,0 mm
 Manometer gauge: bar, psi or KPA

			ID
150.1680	13 pcs	Compression pressure test instrument for diesel engines	2.56

consists of:

			ID
150.1680-1	Manometer with tube	640	
150.1680-2	Glow plug adaptor, M10x1,25	40	
150.1680-3	Glow plug adaptor, M12x1,25	40	
150.1680-4	Glow plug adaptor, M14x1,25	70	
150.1680-5	Compression pressure test adaptor, 114mm	220	
150.1680-6	Compression pressure test adaptor, M24x2	160	
150.1680-7	Compression pressure test adaptor	60	
150.1680-8	Glow Plug Adaptor M 10 x 1,25	60	
150.1680-9	Glow plug adaptor, M10x1	45	
150.1680-10	Compression pressure test adaptor	145	
150.1680-11	Replacement sealings and washers	15	
150.1680-12	Angle connecting piece	50	
150.1680-13	Clamp arch	70	

Digital compression pressure test set for petrol engines

- For dry and wet compression tests
- Compact adaptor pieces with quick couplings
- Includes extensive adaptor assortment and analogue manometer (psi)
- Digital manometer with reading storage up to 12 cylinders
- By means of brass coupling the repair is possible on valve seals without dismantling of the cylinder head
- Very flexible tube for hard to access places
- In durable plastic storage case



			ID
150.1650	10 pcs	Digital compression pressure test set for petrol engines	2.20

consists of:

			ID
150.1650-1	Manometer digital	420	
150.1650-2	Replacement seals and valve assortment	5	
150.1650-3	Manometer analogue	120	
150.1650-4	Adaptor tube M18 x 1,5	100	
150.1650-5	Adaptor tube M14 x 1,25 long	90	
150.1650-6	Adaptor tube M14 x 1,25 short	110	
150.1650-7	Adaptor bush L=64 mm, M18 x 1,5	105	
150.1650-8	Adaptor bush L=42 mm, M12 x 1,25	40	
150.1650-9	Adaptor bush L=42 mm, M10 x 1,0	40	
150.1650-10	Coupling 1/4" IG	80	

Diesel injector test device set 0-600 bar

- Table device for the testing of diesel injectors for opening pressure, density and jet shape
- During testing the fluid is injected back in to the storage tank with spray guard
- Fluid container volume 330 cm³
- Piston displacement 35 cm³
- Bolted precision manometer Ø 100.0 mm with protective rubber parts 0-600 bar
- Includes two high pressure pipe adapters
- Device body made from sturdy metal cast
- Test container from shock-proof and diesel resistant plastic with fine filter
- Feet (118 mm x 97 mm) with four bore holes for sturdy mounting onto work bench

For testing the following methods:

- Jet free or blocked
- Opening pressure
- Jet nozzle pattern/nebulisation
- Clasp drip behaviour
- Acoustic inspection (chattering)
- Density of the pressure tube between injection pump and nozzle

Application range:

M14 x 1.5 universal
M12 x 1.25 VAG TDI engines



	H mm	⚖️
455.0120	345.0	2.90

consists of:

		⚖️
455.0121	Connection pipe M14 x M14, 210 mm	80
455.0122	Connection pipe M14 x M12, 210 mm	72
455.0123	Diesel injector test device 0-600 bar	2700

Low fuel pressure diagnosis set

- Ideal for the quick and easy testing of low pressure circuit (fuel pressure and return pressure measurement)
- Quick to find leaks
- Fits all common vehicles
- The pressure loss inspection is carried out via the manometer
- Quick and efficient use
- For the diagnosis of the following basic tests: the supply of fuel from the tank, air bubbles in the fuel system, impurities in the fuel
- In durable plastic storage case

Application range: Commercial vehicles, transporters and MPVs



		⚖️
150.1845	14 pcs Low fuel pressure diagnosis set	4.00

consists of:

	X		⚖️
150.1846	2	Adaptor hose Ø 6.0 mm, 2 m long	320
150.1847	1	Manometer 1.0-5.0 bar incl. connection nipple and safety cover	140
150.1848	1	Manometer 1.0-15.0 bar incl. connection nipple and safety cover	140
150.1849	1	T-piece SAE 8 x 20 mm (red)	100
150.1851	1	T-piece SAE 9.5 x 20 mm (grey)	100
150.1852	1	T-piece SAE 10 x 20 mm (green)	120
150.1853	1	T-piece SAE 10 x 30 mm (blue)	120
150.1854	1	T-piece NG8 Type 246 (white)	100
150.1855	1	T-piece Ø 6.0 mm (brown)	60
150.1856	1	T-piece Ø 8.0 mm (orange)	60
150.1857	1	T-piece Ø 10.0 mm (purple)	60
150.1858	1	T-piece 11.8 x 25 mm (light blue)	140
150.1859	1	T-piece SAE 8 x 30 mm (yellow)	100

Fuel system testing and cleaning set

- Makes possible quick, simple and correct operation of the engine, without using the tank fitted to the vehicle
- Suitable for diagnosing faults between the tank and high-pressure tank, fuel filter, etc.
- Ideal for fuel systems to release soiling and gunk in the injection system with an exact mix of fuel/cleaning agent
- In durable plastic storage case

Application range: Universally suitable for all vehicles with a naturally aspirated engine



		⚖️
150.1860	43 pcs Fuel system testing and cleaning set	8.00

consists of:

	X		⚖️
150.1861	1	10 litre container	1000
150.1661	1	Hand pump with male coupling	280
150.1862	2	Adaptor hose Ø 8.0 mm, 4 m long	650
150.1864	1	Adapter set 3 part SAE 8 x 20 mm (red)	120
150.1865	1	Adapter set 3 part SAE 8 x 30 mm (yellow)	120
150.1866	1	Adapter set 3 part SAE 9.5 x 20 mm (grey)	120
150.1867	1	Adapter set 3 part SAE 10 x 20 mm (green)	120
150.1868	1	Adapter set 3 part SAE 10 x 30 mm (blue)	160
150.1869	1	Adapter set 3 part NG8 Type 246 (white)	120
150.1870	1	Adapter set 3 part Ø 6.0 mm (light blue)	200
150.1871	1	Adapter set 3 part Ø 8.0 mm (pink)	180
150.1872	1	Adapter set 3 part Ø 10.0 mm (purple)	100
150.1873	1	Adapter set 3 part 11.8 x 25 mm (brown)	80
150.1874	1	Adapter set 3 part NG12 Type 246 (orange)	100
150.1875	1	Adapter set 3 part Ø 12.0 mm (black)	140
150.2324	2	Double-sided adapter 3/8", short	36
150.2323	1	Double-sided quick coupling 3/8"	74

PNEUMATIC ADAPTER FOR GLOW PLUG BORES

Pneumatic adapter for M8 x 1.0 glow plug holes

- Ideal for boring in the glow plug bores
- The injection of air prevents contaminants building up in the combustion chamber
- Enables simple and professional work
- Air supply can be set with lever
- Robust design
- Special steel

Application range: Citroën, Fiat, Ford, Lancia, Opel, Mercedes, Suzuki, Volvo, etc. with M8 x 1.0 glow plug thread



	Connection thread mm	Length mm	D mm	⚖️
152.1511	M8 x 1.0	178.0	12 x 80	180

Pneumatic adapter for M10 x 1.0 glow plug holes

- Ideal for boring in the glow plug bores
- The injection of air prevents contaminants building up in the combustion chamber
- Enables simple and professional work
- Air supply can be set with lever
- Robust design
- Special steel

Application range: BMW, Chrysler, Opel, Mercedes, Nissan, Renault, etc. with glow plug thread M10 x 1.0



	Connection thread mm	Length mm	D mm	⚖️
152.1512	M10 x 1.0	178.0	15 x 100	180

Pneumatic adapter for M10 x 1.25 glow plug holes

- Ideal for boring in the glow plug bores
- The injection of air prevents contaminants building up in the combustion chamber
- Enables simple and professional work
- Air supply can be set with lever
- Robust design
- Special steel

Application range: Toyota, Lexus, etc. with glow plug thread M10 x 1.25



	Connection thread mm	Length mm	D mm	⚖️
152.1513	M10 x 1.25	207.0	15	190



INJECTOR REMOVAL TOOLS

Injector grab hook extractor with 1.25 kg impact weight

- For Mercedes CDI Bosch common rail injectors
- For the extraction of the firmly burned injectors in the cylinder head
- Arched lever area on the handle hook for exact extraction
- Tilting and jamming of the injector is avoided
- Claw and impact weight can be used separately
- Includes impact weight
- Special steel



Impact weight kg	Thread impact weight	L mm	Replacement size	Replacement impact weight	kg
152.1050	1.25	M10 x 1.5	410.0	152.1045 152.1040	1.45

Injector extractor with 6 + 3 kg impact weight

- Ideal for Bosch injectors with M17 x 1.0 internal thread
- Robust design
- For the extraction of the firmly burned injectors in the cylinder head
- Enables short and intensive impact through impact weight
- Cylinder head does not work against the thrust bearing
- Avoids tilting of the injectors
- Includes impact weight
- Special steel

Application range: Bosch injectors with M17 x 1.0 internal thread



kg	kg
152.1055	3 pcs

consists of:

kg	kg
700.1415	Universal slide hammer 6 + 3 kg, 850mm
152.1056	Single screw adaptor AG M17 x 1
152.1057	Hexagon socket, tamperproof 10 mm

Injector-extractor for 1.5 kg impact weight

- Ideal for Siemens injectors with M 25 x 1.0 internal thread
- Robust design
- For the extraction of the firmly burned injectors in the cylinder head
- Enables short and intensive impact through impact weight
- Cylinder head does not work against the thrust bearing
- Avoids tilting of the injectors
- Short design for hard-to-reach areas
- Includes impact weight
- Thread on impact extractor 5/16" x 16 mm
- Special steel

Application range: Siemens injectors with M25 x 1.0 internal thread



kg	kg
152.1200	2 pcs

consists of:

kg	kg
152.1255	Slide hammer 1.5 kg, thread 5/16" x 16 mm
152.1455	Screw-in adaptor for Siemens, M25 x 1

Injector-extractor for 1.5 kg impact weight

- Ideal for Denso injectors M20 x 1.0
- Robust design
- For the extraction of the firmly burned injectors in the cylinder head
- Enables short and intensive impact through impact weight
- Cylinder head does not work against the thrust bearing
- Avoids tilting of the injectors
- Short design for hard-to-reach areas
- Includes impact weight
- Thread on impact extractor 5/16" x 16 mm
- Special steel

Application range: Denso injectors with M20 x 1.0 internal thread



kg	kg
152.1265	2 pcs

consists of:

kg	kg
152.1255	Slide hammer 1.5 kg, thread 5/16" x 16 mm
152.1456	Screw-in adaptor for Denso, M20 x 1

Injector-extractor for 1.5 kg impact weight

- Ideal for Siemens injectors M27 x 1.0
- Robust design
- For the extraction of the firmly burned injectors in the cylinder head
- Enables short and intensive impact through impact weight
- Cylinder head does not work against the thrust bearing
- Avoids tilting of the injectors
- Short design for hard-to-reach areas
- Includes impact weight
- Thread on impact extractor 5/16" x 16 mm
- Special steel

Application range: Siemens injectors with M27 x 1.0 internal thread



kg	kg
152.1270	2 pcs

consists of:

kg	kg
152.1255	Slide hammer 1.5 kg, thread 5/16" x 16 mm
152.1457	Screw-in adaptor for Siemens, M27 x 1

Injector-extractor for 1.5 kg impact weight

- Ideally suited Bosch injectors M27/M17 and 10 mm
- Robust design
- For the extraction of the firmly burned injectors in the cylinder head
- Enables short and intensive impact through impact weight
- Cylinder head does not work against the thrust bearing
- Avoids tilting of the injectors
- Short design for hard-to-reach areas
- Includes impact weight
- Thread on impact extractor 5/16" x 16 mm
- Special steel

Application range: Fiat, BMW, Mercedes, Renault engines with Bosch injectors with M27/M17 and 10 mm internal thread



kg	kg
152.1275	4 pcs

consists of:

kg	kg
152.1255	Slide hammer 1.5 kg, thread 5/16" x 16 mm
152.1458	Screw-in adaptor set for Bosch M27/M17 and 10 mm, 3 pitch

Injector-extractor for 1.5 kg impact weight

- Ideal for older high pressure injectors with M12 thread
- Robust design
- For the extraction of the firmly burned injectors in the cylinder head
- Enables short and intensive impact through impact weight
- Cylinder head does not work against the thrust bearing
- Avoids tilting of the injectors
- Short design for hard-to-reach areas
- Includes impact weight
- Thread on impact extractor 5/16" x 16 mm
- Special steel

Application range: for older high pressure injectors with M12 thread



kg	kg
152.1280	2 pcs

consists of:

kg	kg
152.1255	Slide hammer 1.5 kg, thread 5/16" x 16 mm
152.1459	Screw-in adaptor for M12

Injector-extractor for 1.5 kg impact weight

- Ideal for Bosch and Delphi injectors M14
- Robust design
- For the extraction of the firmly burned injectors in the cylinder head
- Enables short and intensive impact through impact weight
- Cylinder head does not work against the thrust bearing
- Avoids tilting of the injectors
- Short design for hard-to-reach areas
- Includes impact weight
- Thread on impact extractor 5/16" x 16 mm
- Special steel

Application range: Bosch and Delphi injectors with M14 thread



kg	kg
152.1285	2 pcs

consists of:

kg	kg
152.1255	Slide hammer 1.5 kg, thread 5/16" x 16 mm
152.1461	Screw-in adaptor for Bosch and Delphi, M14

Universal injector-extractor

- For the extraction of the firm y burned injectors in the cylinder head
- With arched contact surface on the handle hook for exact positioning
- Avoids tilting of the injectors
- Claw and impact weight can be used separately
- Includes impact weight
- Special steel

Application range: Common Rail engines with Denso, Bosch, Siemens, Delphi injectors



	Impact weight kg	Length mm	
152.2070	1.55	395.0	3.22

Air chisel injector pump puller set with adaptors

- Suited to the dismantling of injectors
- Robust design
- For the extraction of the firm y burned injectors in the cylinder head
- Enables short and intensive impacts by supporting a pneumatic power chisel with 10 mm adapter
- Cylinder head does not work against the thrust bearing
- Avoids tilting of the injectors
- Includes extensive range of adaptors
- Thread on injector extractor 5/16" x 16 mm
- Special steel



152.1450 10 pcs Air chisel injector pump puller set with adaptors	3.54

consists of:

152.1455 Screw-in adapter for Siemens, M25 x 1	180
152.1456 Screw-in adapter for Denso, M20 x 1	180
152.1457 Screw-in adapter for Siemens, M27 x 1	240
152.1458 Screw-in adapter set for Bosch M27/M17 and 10 mm, 3 pitch	300
152.1459 Screw-in adapter for M12	140
152.1461 Screw-in adapter for Bosch and Delphi, M14	200
152.1462 Universal adapter	150
152.1463 Pneumatic power chisel extractor	1400

Universal injector removal kit

- Suited to the dismantling of injectors
- Robust design
- For the extraction of the firm y burned injectors in the cylinder head
- enables short and intensive impact through impact weight
- Cylinder head does not work against the thrust bearing
- Avoids tilting of the injectors
- including extensive range of adaptors
- Includes impact weight
- Receiving thread on injector extractor M18 x 1.5 mm
- Special steel
- In durable plastic case



152.1085 14 pcs Universal injector removal kit	13.00

consists of:

152.1086 Injector nozzles hexagon socket with borehole 10 mm, Ø 6 mm	78
152.1087 Injector nozzles hexagon socket with borehole 10 mm, Ø 7 mm	80
152.1088 M14 x 1.5 mm adapter, BMW M47, MB W211cdl	68
152.1089 M16 x 1.0 mm adapter, Toyota 2.2	110
152.1190 M17 x 1.0 mm adapter, MB Bosch	114
152.1191 M20 x 1.0 mm adapter, Denso	110
152.1192 M25 x 1.0 mm adapter, Siemens	126
152.1193 M27 x 1.0 mm adapter, Siemens	136
152.1194 Slide hammer 3 + 5 kg	7840
152.1195 1/2" injector socket, 25.0 mm, l = 100 mm	270
152.1196 1/2" injector socket, 27.0 mm, l = 100 mm	270
152.1197 1/2" injector socket, 29.0 mm, l = 100 mm	342
152.1198 1/2" injector socket, 30.0 mm, l = 100 mm	358
152.1199 M18 x 1.5 mm universal joint	474

Pump/nozzle and TDI injector extractor set

- Ideal for disassembly of pumps/nozzle units
- Robust design
- For the removal of the firm y burned pump/nozzle unit from the cylinder head
- Cylinder head does not work against the thrust bearing
- Avoids tilting of the injectors
- Special steel

Application range: Audi, Volkswagen, Seat, Škoda, etc.



152.1405 6 pcs Pump/nozzle and TDI injector extractor set	1.16

consists of:

152.1352 Impact weight for 152.1350	809
152.1354 Guide rod with nut for 152.1350	110
152.1359 T-type extractor for 152.1350	49
152.1360 T-type extractor for 152.1360	62
152.1363 Hex bolts for 152.1350	102
152.1364 Hex bolts for 152.1350	38

Injector nozzle extractor set for VAG

- Suited to the dismantling of injectors
- suitable for FSI, SDI, TDI, Common Rail and pump injector engines
- Robust design
- For the extraction of the firm y burned injectors in the cylinder head
- Cylinder head does not work against the thrust bearing
- Avoids tilting of the injectors
- including extensive range of adaptors
- Special steel

Application range: Audi, Volkswagen, Seat, Škoda, etc.



152.1350 24 pcs Injector nozzle extractor set for VAG	3.00

consists of:

152.1351 Handle for 152.1350	379
152.1352 Impact weight for 152.1350	809
152.1353 Guide rod for 152.1350	51

consists of:

152.1354 Guide rod with nut for 152.1350	110
152.1355 Injector pump extractor for 152.1350	258
152.1356 Brass casing no 1 for 152.1350	73
152.1357 Brass casing no 2 for 152.1350	74
152.1358 Brass casing no 3 for 152.1350	74
152.1359 T-type extractor for 152.1350	49
152.1360 T-type extractor for 152.1360	62
152.1361 Adjustable extracting tool for 152.1350	100
152.1362 Socket extracting tool for 152.1350	90
152.1363 Hex bolts for 152.1350	102
152.1364 Hex bolts for 152.1350	38
152.1365 Brass cone for 152.1350	7
152.1366 Brass casing 14 x 40 mm	46
152.1367 Brass casing 12.5 x 40 mm	49
152.1368 Brass casing 12.5 x 20 mm	19
152.1369 Connector extraction tool type I	52
152.1379 Injector extraction sleeve	173
152.1451 Connector extraction tool type U	47
152.1452 Brass cone 10 x 7 x 35 mm	15
152.1453 Stainless steel wrench for 152.1350	6
152.1454 Bracket injector extracting tool for 152.1350	173

INJECTOR SEALING RING EXTRACTOR

Injector sealing ring extractor

- Ideal for removing firm y burned injector copper sealing rings from the injector shaft
- No damage to the cylinder head
- Universal usage
- Precision pressing on the sealing ring
- Simple handling and guiding
- Special steel

Application range: BMW, Mercedes, Opel, Renault, Nissan, etc.



	L mm	
152.1173	260	425

Injector sealing ring extractor with impact weight

- Ideal for removing firm y burned injector copper sealing rings from the injector shaft
- No damage to the cylinder head
- Universal usage
- precision pressing on the sealing ring due to cone-shaped gear tooth system
- Simple handling and guiding
- Special steel

Application range: BMW, Mercedes, Honda, Peugeot, Opel, Renault, Nissan, etc.



	Ø mm	Length mm	Impact weight kg	
152.1183	4 - 16	370.0	850.00	1.36

Injector test equipment

- For the diagnosis of fuel pipes and faults in electronic injectors
- Pulse generator may be used with fuel manometer



150.9010 Injector test equipment	200

INJECTOR AND INJECTOR SEAT CLEANING

Injector sealing surface cleaner

- Ideal for cleaning the injector head
- Clean, professional and fast work
- Simple handling
- Special steel



	Ø mm	L mm	PK
152.1179	20.0	49.0	97

Injector seal seat cutter Ø 15/19 mm

- Ideally suited to cleaning the injector seat
- Clean, professional and fast work
- Simple handling
- With T-handle
- Special steel

Application range: various manufacturers



	Ø mm	L mm	PK
152.1465	15/19	481	481

consists of:

		PK
152.1171	3/8" Milling head pilot, 19.0 mm, 175 mm	185
152.1172	1/2" T-handle key for milling machine, 150mm	240
152.1175	Injector gasket milling seat head Ø 15/19mm, 38mm	550

Injector seal seat cutter Ø 17/17 mm

- Ideally suited to cleaning the injector seat
- Clean, professional and fast work
- Simple handling
- With T-handle
- Special steel

Application range: BMW, PSA, Renault



	Ø mm	L mm	PK
152.1466	17/17	471	471

consists of:

		PK
152.1171	3/8" Milling head pilot, 19.0 mm, 175 mm	185
152.1172	1/2" T-handle key for milling machine, 150mm	240
152.1176	Injector gasket milling seat head Ø 17/17mm, 38mm	47

Injector seal seat cutter Ø 17/19 mm

- Ideally suited to cleaning the injector seat
- Clean, professional and fast work
- Simple handling
- With T-handle
- Special steel

Application range: Mercedes



	Ø mm	L mm	PK
152.1467	17/19	460	460

		PK
152.1171	3/8" Milling head pilot, 19.0 mm, 175 mm	185
152.1172	1/2" T-handle key for milling machine, 150mm	240
152.1177	Injector gasket milling seat head Ø 17/19mm, 38mm	58

Injector seal seat cutter Ø 19/21 mm

- Ideally suited to cleaning the injector seat
- Clean, professional and fast work
- Simple handling
- With T-handle
- Special steel

Application range: Fiat, Iveco



	Ø mm	L mm	PK
152.1464	19/21	490	490

consists of:

		PK
152.1171	3/8" Milling head pilot, 19.0 mm, 175 mm	185
152.1172	1/2" T-handle key for milling machine, 150mm	240
152.1178	Injector gasket milling seat head Ø 19/21mm, 38mm	68

Injector density seat cleaning set

- Assortment to the cleaning of the density seat of the diesel injector
- Simple handling
- For a correct and damage free use
- In durable plastic storage case

Application range: Mercedes Benz CDI Engine, Bosch/Delphi Injectors, (BMW, Renault, Ford, Fiat, Iveco)



		PK
152.1170	13 pcs Injector density seat cleaning set	238

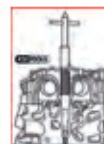
consists of:

		PK
152.1171	3/8" Milling head pilot, 19.0 mm, 175 mm	185
152.1172	1/2" T-handle key for milling machine, 150mm	240
152.1173	Injector sealing ring, 260mm	425
152.1174	Injector milling re-seating tool, 225mm	370
152.1175	Injector gasket milling seat head Ø 15/19mm, 38mm	550
152.1176	Injector gasket milling seat head Ø 17/17mm, 38mm	47
152.1177	Injector gasket milling seat head Ø 17/19mm, 38mm	58
152.1178	Injector gasket milling seat head Ø 19/21mm, 38mm	68
152.1180	Cleaning brush	45
152.1181	Milling head cleaning brush, nylon	13

Injector seat cleaning tool

- Ideally suited to cleaning the injector seat
- The special design enables cleaning of the nozzle seat, the mounting hole of the injection nozzles and the small openings to the combustion chamber in one single process
- Clean, professional and fast work
- Simple handling
- With T-handle
- Special steel

Application range: BMW Common Rail diesel engines M47TU, M57 and M57TU

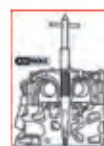


	Ø1 mm	Ø2 mm	Ø3 mm	Length mm	PK
152.1386	7.5	17.0	23.7	296.0	370

Injector seat cleaning tool

- Ideally suited to cleaning the injector seat
- The special design enables cleaning of the nozzle seat, the mounting hole of the injection nozzles and the small openings to the combustion chamber in one single process
- Clean, professional and fast work
- Simple handling
- With T-handle
- Special steel

Application range: BMW Common Rail M47 diesel engines

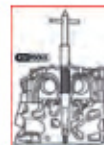


	Ø1 mm	Ø2 mm	Length mm	PK
152.1387	7.5	17.0	290.0	370

Injector seat cleaning tool

- Ideally suited to cleaning the injector seat
- The special design enables cleaning of the nozzle seat, the mounting hole of the injection nozzles and the small openings to the combustion chamber in one single process
- Clean, professional and fast work
- Simple handling
- With T-handle
- Special steel

Application range: Mercedes Common Rail diesel engines OM611, OM612, OM 613, OM639, OM640, OM642, OM646, OM647, OM648, OM651, OM668, Smart R660; PSA 2.7 HDI, Motor DT17 and 3.0 HDI, DT20 engine; Chrysler 2.5 crd, engine OM664; Toyota 3.0 D-4D, engine 1 KD-FTV and 2.2 D-4D, engine 2 AD-FHV and 2 AD-FTV; Lexus 2.2 diesel, engine 2 AD-FHV



	Ø1 mm	Ø2 mm	Ø3 mm	Length mm	PK
152.1388	7.5	17.0	19.1	261.0	360

Injector seat cleaning tool

- Ideally suited to cleaning the injector seat
- The special design enables cleaning of the nozzle seat, the mounting hole of the injection nozzles and the small openings to the combustion chamber in one single process
- Clean, professional and fast work
- Simple handling
- With T-handle
- Special steel

Application range: Opel, Fiat, Lancia, Suzuki 1.3 JTD, 1.3 CDTi, 1.3 JTD, 1.3 DDiS Common-Rail diesel engines Z13DT, 188A9.000.



	Ø1 mm	Ø2 mm	Ø3 mm	Length mm	kg
152.1389	7.5	17.0	17.6	261.0	360

Injector seat cleaning tool

- Ideally suited to cleaning the injector seat
- The special design enables cleaning of the nozzle seat, the mounting hole of the injection nozzles and the small openings to the combustion chamber in one single process
- Clean, professional and fast work
- Simple handling
- With T-handle
- Special steel

Application range: Renault, Nissan, Opel, Suzuki, Mitsubishi, 1.9 dTi, 1.9 dCi, 1.9 Di, 1.9 DDiS, 1.9Di-D Common Rail diesel engines



	Ø1 mm	Ø2 mm	Ø3 mm	Length mm	kg
152.1391	7.5	17.4	19.0	245.0	350

Injector seat cleaning tool

- Ideally suited to cleaning the injector seat
- The special design enables cleaning of the nozzle seat, the mounting hole of the injection nozzles and the small openings to the combustion chamber in one single process
- Clean, professional and fast work
- Simple handling
- With T-handle
- Special steel

Application range: Renault, Suzuki, Nissan, Dacia, 1.5 dCi, 1.5 DDiS Common Rail diesel engines K9K



	Ø1 mm	Ø2 mm	Ø3 mm	Length mm	kg
152.1392	7.5	17.0	20.1	265.0	360

Injector seat cleaning tool

- Ideally suited to cleaning the injector seat
- The special design enables cleaning of the nozzle seat, the mounting hole of the injection nozzles and the small openings to the combustion chamber in one single process
- Clean, professional and fast work
- Simple handling
- With T-handle
- Special steel

Application range: Peugeot, Citroën, Fiat, Lancia, Suzuki, 2.0 HDi, 2.0 JTD, engine code DW10 Common Rail diesel engines, Mercedes, OM646 EVO, Renault, Nissan, Opel, 2.2 DTI, CDTi, CDI, engine code G9T and 2.5 DTI, CDTi, CDI, engine code G9U



	Ø1 mm	Ø2 mm	Length mm	kg
152.1393	7.5	17.0	261.0	360

Injector seat cleaning tool

- Ideally suited to cleaning the injector seat
- The special design enables cleaning of the nozzle seat, the mounting hole of the injection nozzles and the small openings to the combustion chamber in one single process
- Clean, professional and fast work
- Simple handling
- With T-handle
- Special steel

Application range: Peugeot, Citroën, Fiat, Lancia, 2.2 HDi, 2.2 JTD, Common-Rail diesel engines



	Ø1 mm	Ø2 mm	Ø3 mm	Length mm	kg
152.1394	7.5	17.0	19.6	275.0	360

Injector seat cleaning tool

- Ideally suited to cleaning the injector seat
- The special design enables cleaning of the nozzle seat, the mounting hole of the injection nozzles and the small openings to the combustion chamber in one single process
- Clean, professional and fast work
- Simple handling
- With T-handle
- Special steel

Application range: 1.6 l PSA Common Rail diesel engines, Fiat 1.6 l HDi, engine code DV6, 9HX, 9HY, 9HZ; Ford 1.6 l TDCi, engine code G8DA, G8DB, HHDA, HHJA, HHJB; Volvo 1.6 l D, engine code D4164T; Mazda 1.6 l D, engine code Y6



	Ø1 mm	Ø2 mm	Ø3 mm	Ø4 mm	Length mm	kg
152.1395	7.5	17.0	17.6	18.7	195.0	330

INJECTOR SHAFT CLEANING

Injector pump cleaning set

- Range for cleaning the injector shaft
- Also suitable for various other applications
- Cleaning brushes with various diameters
- Simple handling
- For correct and damage-free use
- In durable plastic storage case



	kg
152.1370 23 pcs Injector pump cleaning set	1.80

consists of:

	x		kg
152.1173	1	Injector sealing ring extractor	425
152.1372	1	Sealing plugs assembly rod	30
152.1373	6	Sealing plugs for M5 internal thread	4
152.1374	1	Bit receptacle with flexible shaft	80
152.1375	2	Brush for nozzle channel Ø 7,24 mm	16
152.1376	2	Brush for injector shaft Ø 18 mm	10
152.1381	2	Brush for injector shaft Ø 19 mm	10
152.1382	2	Brush for injector shaft Ø 21 mm	10
152.1383	2	Brush for injector shaft Ø 24 mm	10
152.1377	1	Special holder for injector shaft brushes	71
152.1384	2	End brush with corrugated brass wire	32
152.1385	1	Plastic sleeve for end brush	22

MASTER cleaning brush set

- For cleaning and deburring threads, cylinders, connectors, pipes and other components with nylon, brass and steel edging
- With external hexagon drive to DIN 3126/ISO 1173 - C 6.3
- With locking and quick-change mechanism on the handle grip and extension
- Can be used by hand or with an electric screwdriver
- Can be used with an electric screwdriver in a clockwise direction
- Nickel plated
- In durable plastic storage case

Application range: For cleaning all types of thread, spreader bar seals on injection lines of cylinder heads, brake calliper sliding sleeves, O-ring entries, injector seal seats, valves of exhaust gas recirculation systems, inlet and outlet openings, etc.



	kg
340.0010 38 pcs MASTER cleaning brush set	1.43

consists of:

		kg
340.0061	1/4" handle with quick action lock	71
340.0062	1/4" extension with quick action lock	51
340.0063	1/4" brass brush Ø 8 mm	15
340.0064	1/4" brass brush Ø 9 mm	15
340.0065	1/4" brass brush Ø 10 mm	15
340.0066	1/4" brass brush Ø 11 mm	16
340.0067	1/4" brass brush Ø 12 mm	16
340.0068	1/4" brass brush Ø 13 mm	16
340.0069	1/4" brass brush Ø 14 mm	17
340.0070	1/4" brass brush Ø 15 mm	17
340.0071	1/4" brass brush Ø 16 mm	17
340.0072	1/4" brass brush Ø 17 mm	18
340.0073	1/4" brass brush Ø 18 mm	18
340.0074	1/4" brass brush Ø 19 mm	18
340.0075	1/4" steel brush Ø 8 mm	15
340.0076	1/4" steel brush Ø 9 mm	15
340.0077	1/4" steel brush Ø 10 mm	15
340.0078	1/4" steel brush Ø 11 mm	15
340.0079	1/4" steel brush Ø 12 mm	16
340.0080	1/4" steel brush Ø 13 mm	16
340.0081	1/4" steel brush Ø 14 mm	17
340.0082	1/4" steel brush Ø 15 mm	17
340.0083	1/4" steel brush Ø 16 mm	17
340.0084	1/4" steel brush Ø 17 mm	17
340.0085	1/4" steel brush Ø 18 mm	18
340.0086	1/4" steel brush Ø 19 mm	18
340.0087	1/4" nylon brush Ø 8 mm	15
340.0088	1/4" nylon brush Ø 9 mm	15
340.0089	1/4" nylon brush Ø 10 mm	15
340.0090	1/4" nylon brush Ø 11 mm	15

consists of:

340.0091	1/4" nylon brush Ø 12 mm	15	
340.0092	1/4" nylon brush Ø 13 mm	15	
340.0093	1/4" nylon brush Ø 14 mm	15	
340.0094	1/4" nylon brush Ø 15 mm	15	
340.0095	1/4" nylon brush Ø 16 mm	15	
340.0096	1/4" nylon brush Ø 17 mm	15	
340.0097	1/4" nylon brush Ø 18 mm	15	
340.0098	1/4" nylon brush Ø 19 mm	15	

INJECTOR PUMP WRENCH

Injector pump wrench

- Ideal for assembly and disassembly of securing screws on the injection pump
- Also required when changing the tooth belt or to adjust the beginning of the injection process
- 90° angled
- Matt finish
- Chrome vanadium

Application range: Audi 1.6 l diesel, Citroën, Volkswagen Golf, Jetta, Caddy, Passat, etc.



	mm	L mm	
152.1396	13	165.0	140

Injector pump multi-tooth socket

- Ideal for assembly and disassembly of the pressure Valve holder on the in-line injection pump
- Also required for start of fuel delivery inspection
- Internal square drive to DIN 3120/ISO 1174 with ball reception
- Matt finish
- Chrome vanadium

Application range: Mercedes diesel engines 601, 602, 603, 605, 606, 615, 616, 617



	mm	L mm	D mm	
152.1397	33	40.0	27.0	104



Bosch injector pump socket set

- Ideal for Bosch high pressure pumps (VP37) and distributor injection pumps
- For loosening the cover screws
- Required for disassembling and tightening the pump
- Special steel

Application range: Bosch VP37, Bosch VE pumps



152.1380	2 pcs	Bosch injector pump socket set	114	

consists of:

152.1347	Bosch injector pump socket, Ø 18 mm, l = 36 mm	44		
152.1348	Bosch injector pump socket, Ø 19.7 mm, l = 45 mm	70		

PUMP WHEEL EXTRACTOR

Injector pump sprocket removal tool for BMW

- Ideal for loosening the injection pump sprocket from the shaft when disassembling the injection pump
- Robust design
- Special steel

Application range: BMW engine 4 cylinder M41 and 6 cylinder M51, Opel Omega B 2.5 TD



	Ø mm	Length mm	
150.1506	32,5	79,0	220

Injector pump sprocket removal tool for BMW

- Ideal for securing the injection pump sprocket and for pushing out the injection shaft
- Necessary for disassembling the injection pump
- With extractor sleeve and hexagon adapter
- Robust design
- Special steel

Application range: BMW 116d, 118d, 120d, 123d (E81, E82, E87, E88, F20)/316d, 318d, 320d, 325d, 330d (E90, E91, E92, E93, F30)/520d, 525d, 530d, 530d GT, 535d, 535d GT, M550d (E60, E61, F07, F10, F11)/640d (F12)/730d, 740d, 750d (F01)/X1 - 1.8d, 2.0d, 2.3d (E84)/X3 - 1.8d, 2.0d, 3.0d, 3.5d (E83, F25)/X5 - 3.0d, 4.0d, M5.0d (E70)/X6 - 3.0d, 4.0d, M5.0d (E71)

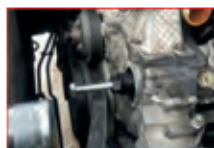


	Ø mm	Length mm	
150.1507	32,0	33,0	80

Injection pump sprocket removal tool set for BMW

- Ideal for securing the injection pump sprocket and for pushing out the injection shaft
- Necessary for disassembling the injection pump
- Robust design
- Special steel

Application range: BMW engines M47, M47T2, M47TU, M57, M57TU (E38, E39, E60, E61, E46, E53)



150.1575	4 pcs	Injection pump sprocket removal tool set for BMW	520	

consists of:

150.1576	Casing	160	
150.1577	Spindle M18 x 1.5 mm	60	
150.1578	Threaded sleeve, M40 x 1.5 mm	120	
150.1579	Threaded sleeve, M42 x 1.5 mm	180	

LOCKRING DRIVER AND ADJUSTMENT TOOLS

Injector pump locking pin

- Ideal for securing the injection pump for adjustment work on engines
- Simple handling
- Special steel

Application range: Ford

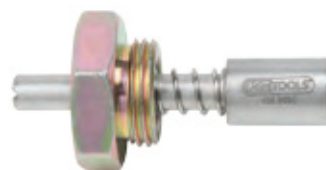


	Ø mm	L1 mm	L2 mm	
400.0251	6,0	78,0	49,0	30

In-line injector pump adjusting screw

- Ideal for setting the start of fuel delivery of the in-line injector pump
- Simple handling
- Special steel

Application range: Mercedes diesel engines 601, 602, 603, 605, 606 and 617



	Ø mm	Length mm	
400.9050	6,0	52,0	60

Valve injection pump block screw

- Ideal for locking the distributor injection pump when starting to deliver fuel when assembling and disassembling
- Simple handling
- Special steel

Application range: Mercedes diesel engine 604 with Lucas distributor injection pump, Renault with Delphi distributor injection pump



	Ø mm	Length mm	Weight g
400.9055	6,5	62,0	20

Valve injector pump alignment pin

- Ideal for locking distributor injection pump e.g. when changing tooth belt
- Simple handling
- Special steel

Application range: Fiat Ducato 2.5, 2.8D, 2.8TD, Cromia TD; Peugeot; Opel Movano 2.5D; Citroën



	Ø mm	Length mm	Weight g
400.9060	5,0	70,0	80

Injection pump locking pin

- Ideal for securing the injection pump for adjustment work on engines
- Simple handling
- Special steel

Application range: Opel, Isuzu, Vauxhall, General Motors



	Ø mm	L mm	Weight g
400.0678	6,0	110,0	41

Injection pump wheel fixing tool

- Ideal for locking the sprocket wheel of the injection pump
- Simple handling
- Special steel

Application range: Renault Clio, Megane, Laguna, Kangoo 1.9 DTI, MC: F9Q



	Weight g
400.9016	166

Injection pump locking pin

- Ideal for securing the injection pump
- Simple handling
- Special steel

Application range: Audi, Volkswagen



	Ø mm	Length mm	Weight g
400.9015	15,4	67,0	126

VAG Injection pump locking pin

- For the professional engine repair
- Ideally suited to securing the injection pump
- With air inlet
- Simple handling
- Special steel
- Very high degree of accuracy

Application range: Volkswagen Lupo 3L, 1.2/1.4 TDi, Polo 1.4 TDi, Golf / Bora 1.9 SDi / TDi, Passat 1.9 TD (1994-1996), Beetle 1.9 TDi (>1999) and Transporter 1.9TD



	Ø mm	L mm	Weight g
400.9018	6,0	80,0	20

Injection pump locking pin

- Ideal for setting up the injection pump
- Simple handling
- Special steel

Application range: Renault



	Ø mm	L mm	Weight g
400.1805	5,0	75,0	20

Pump cover locking tool

- Ideal for locking the injection pump when carrying out adjustment work on the engine
- Simple handling
- Special steel

Application range: Ford



	Ø mm	Weight g
400.0807	104,0	2

Injector pump locking pin set

- Ideal for securing the injection pump for adjustment work on engines
- Simple handling
- Special steel

Application range: Austin Maestro, Maestro Van, Montego



	Ø mm	L mm	Weight g
400.0289	6,0	70,0	14

Camshaft locking pin

- Ideal for securing the injection pump for adjustment work on engines
- Simple handling
- Special steel

Application range: Citroën AX, Jumper, Jumper II, Saxo, XM, Xsara, Ducato
MC: 8140.43, 8140.43S, 8140.63, F1AE0481C, F1AE0481D, F1AE0481N, THY (DK5ATE/L), THY (DK5ATED), VJX (TUD5B/L4), VJY (TUD5/Y), VJY (TUD5/Y/L3), VJZ (TUD5/L/L3), VJZ (TUD5/L/Y/L3), VJZ (TUD5/L3)



	Ø mm	Length mm	Weight g
400.0165	5,0	70,0	19

INJECTOR PUMP ADJUSTING TOOLS

Pump injector setting gauge, 3 cylinders

- Simple adjustment of the pump injector unit during assembly
- Adjustment unit for old and new magnetic valve bolts
- Precision positioning through slotted holes on the cylinder head
- Professional inspection of the assembly position
- Can be used in variety of situations

Application range: Audi, Volkswagen, Seat, Škoda, Ford, with 3 cylinder pump nozzle engines



	Length mm	Weight g
400.9097	305	520

Pump injector setting gauge, 4 cylinders

- Simple adjustment of the pump injector unit during assembly
- Adjustment unit for old and new magnetic valve bolts
- Precision positioning through slotted holes on the cylinder head
- Professional inspection of the assembly position
- Can be used in variety of situations

Application range: Audi, Volkswagen, Seat, Škoda, Ford, with 4 cylinder pump nozzle engines



	Length mm	Weight g
400.9089	410	660

Diesel pump adjustment tool

- Secure stand for the pump wheel when assembling and disassembling the high pressure pump
- exact positioning of the pump wheel
- no need to disassemble the tooth belt
- saves work of making further adjustments to the pump
- Saves a lot of time
- Special steel

Application range: Diesel engines F9Q for Opel, Renault, and Nissan vehicles



	Weight g
400.9051	420

Injector pump adjusting tool set

- For adjusting the start of fuel delivery
- For diesel engines with adjustable pump wheel
- For Bosch and CAV pumps

Application range: 1.9 l diesel direct-injector F8Q and F9Q Renault Clio, Laguna, Megane, Scenic, Mitsubishi, Carisma, Opel, Volvo S40, V40, etc.



	Weight g
400.9065	365

consists of:

		🔩
400.9066	Bosch pump adapter, M10 to M8	6
400.9067	Adjustment tool with 3 x 4 mm pins	300
400.9068	Special applications, 27 mm hexagon socket, 1/2" drive	59

Mounting sleeve set for pump injectors

- For changing the O-rings of the pump injection unit without causing any damage
- Precision positioning of the fuel injection unit
- In durable plastic storage case

Application range: Volkswagen Phaeton and Touareg > 2003, T5 > 2004 (5 + 10 cylinder diesel engines), Touran > 2004, Audi A3 > 2004 (4 cylinder, 4 valve diesel engines), Seat, Skoda, etc.



		🔩
400.9080	6 pcs. Mounting sleeve set for pump injectors	580

consists of:

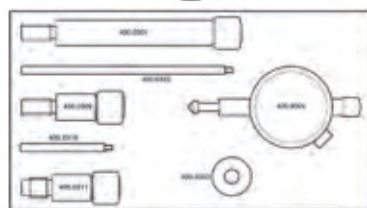
		🔩
400.9083	Adjustment gauge, length 165.00 mm	60
400.9084	Assembly sleeve Ø 17.5 mm, length 28.9 mm	40
400.9085	Assembly sleeve Ø 21.6 mm, length 47.0 mm	60
400.9086	Assembly sleeve Ø 23.3 mm, length 67.2 mm	80
400.9087	Assembly sleeve Ø 31.0 mm, length 28.0 mm	60
400.9088	Assembly sleeve Ø 32.4 mm, length 40.3 mm	60

Diesel fuel pump timing set

- For the professional engine repair
- Precise measuring device
- Very high degree of accuracy
- In durable steel storage case

Application range: Alfa Romeo, Audi, BMW, Daihatsu, Fiat, Ford, Isuzu, Iveco, Lancia, Land Rover, Mazda, Mitsubishi, Nissan, Renault, Rover and Volkswagen vehicles with Bosch, Kikki, Nippon Denso injection pumps with threads of M8, M10 and M12, with new M10 Adapter in particular for Ford Transit

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



		🔩
400.0325	7 pcs. universal	301

consists of:

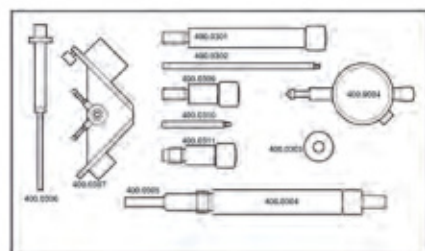
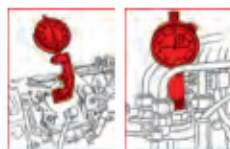
		🔩
400.0301	Dial gauge adapter M8 (Bosch), long	71
400.0302	Dial gauge extension, long 99 mm	9
400.0303	Converter M8 x M12	12
400.9004	Precision-dial indicator gauge 0 - 10 mm	78
400.0309	Dial gauge adapter M8 (Bosch) short, silver	37
400.0310	Dial gauge extension short	4
400.0311	Dial gauge adapter M10 (Bosch) short, black	40

Diesel fuel pump timing set

- For the professional engine repair
- Precise measuring device for the upper entry hole
- For resetting the injection time on diesel engines
- Very high degree of accuracy
- In durable steel storage case

Application range: Alfa Romeo, Audi, BMW, Daihatsu, Fiat, Ford, Isuzu, Iveco, Lancia, Land Rover, Mazda, Mitsubishi, Nissan, PSA (XUD), Renault, Rover, Volkswagen vehicles with Bosch, EP/VE Rotary, Niki, Nippon Denso, CAV Roto-Diesel, Top injection fuel pumps

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



		🔩
400.0300	11 pcs. universal	710

consists of:

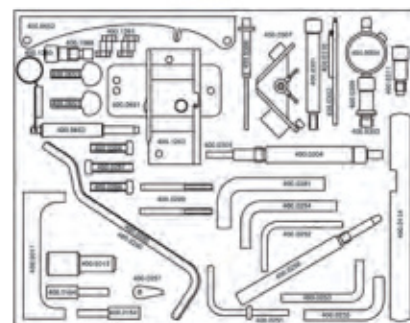
		🔩
400.0301	Dial gauge adapter M8 (Bosch), long	71
400.0302	Dial gauge extension, long 99 mm	9
400.0303	Converter M8 x M12	12
400.9004	TDC determining pin / dial indicator bracket M14 x 2.0 mm	135
400.0305	Extension	460
400.0306	Dial gauge probe for Lukas-CAV-Roto	17
400.0307	Dial gauge assy for Lukas-CAV-Roto	125
400.0309	Dial gauge adapter M8 (Bosch) short, silver	37
400.0310	Dial gauge extension short	4
400.0311	Dial gauge adapter M10 (Bosch) short, black	40
400.9004	Precision-dial indicator gauge 0 - 10 mm	78

Universal - Engine Timing Tool Set for diesel engines

- For the professional engine repair
- Special set for adjusting and locking diesel engines
- Very high degree of accuracy
- In durable steel storage case

Application range: Audi, Citroën, Ford, Opel, Peugeot, Renault, Rover, Volvo, Volkswagen vehicles with diesel engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



		🔩
400.1950	40 pcs. universal	4.74

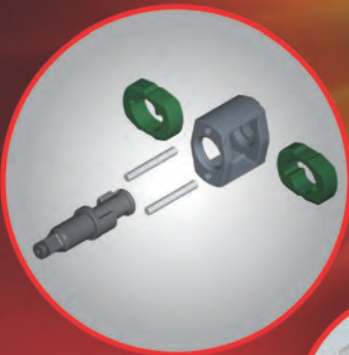
consists of:

		🔩
400.0154	Camshaft setting strap	150
400.0164	Timing pin Ø 6.6 mm (2)	74
400.0251	Injection pump locking pin Ø 6.0 mm	30
400.0252	Camshaft locking pin 6.0 mm	26
400.0253	Locking pin Ø 8.0 mm	41
400.0254	Locking pin Ø 9.5 mm	60
400.0255	Locking pin Ø 10.0 mm	60
400.0257	Crankshaft TDC locking pin	124
400.0258	Shim tool (2)	3
400.0281	Timing pin Ø 12.7 mm	569
400.0285	Crankshaft locking pin Ø 8.0 mm	97
400.0286	Screw M8 x 35 mm (2)	16
400.0287	Screw M8 x 40.0 mm	18
400.0289	Injector pump locking pin (2)	14
400.0290	Crankshaft setting pin Ø 6.0 mm	55
400.0301	Dial gauge adapter M8 (Bosch), long	71
400.0302	Dial gauge extension, long 99 mm	9
400.0303	Converter M8 x M12	12
400.0304	TDC determining pin / dial indicator bracket M14 x 2.0 mm	135
400.0305	Extension	460
400.0306	Dial gauge probe for Lukas-CAV-Roto	17
400.0307	Dial gauge assy for Lukas-CAV-Roto	125
400.0309	Dial gauge adapter M8 (Bosch) short, silver	37
400.0310	Dial gauge extension short	4
400.0311	Dial gauge adapter M10 (Bosch) short, black	40
400.0651	Camshaft locking tool (3)	169
400.0652	Flywheel TDC indicator	80
400.0653	Flywheel locking pin	79
400.1260	Camshaft locking tool (5)	9
400.1261	Locking screw M6 x 10.0 mm	4
400.1263	Mounting bracket assy	330
400.1968	Special tip	16
400.9004	Precision-dial indicator gauge 0 - 10 mm	78
400.9015	Injection pump locking pin Ø 15.4 mm	126
400.9017	Camshaft setting strap	120

TRULY THE HIGHEST PERFORMING 1/2" PNEUMATIC IMPACT WRENCH!



max. 1.690 Nm	max. 510 Nm	max. 680 Nm	max. 931 Nm
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515.1210 MONSTER
High-performance pneumatic impact wrench

1/4" PT	7.930 rpm	178 L/min	6,3 bar	1,2" - 32,0 mm	1,99 kg	<13,56 m/s ²	104 dbA	88 dbA	max. M 16
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our mission!*



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our mission!



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SPARK PLUG CONNECTOR PULLER

T-handle spark plug connector puller, short

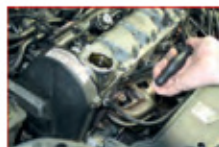
- Short design
- For almost all common vehicle types
- Pipe part slotted to ensure optimal guidance of the cable without damage
- For damage-free removal and insertion of spark plug connectors, even when the engine is warm
- With suspension hole
- 1 piece handle
- Special steel



	L mm	U
500.7525	225.0	230

T-handle spark plug connector puller, long

- Long design specially for engines with deep seating of the spark plugs
- For almost all common vehicle types
- Pipe part slotted to ensure optimal guidance of the cable without damage
- For damage-free removal and insertion of spark plug connectors, even when the engine is warm
- With suspension hole
- 1 piece handle
- Special steel



	L mm	U
500.7535	350.0	270

T-handle spark plug connector puller, angled, long

- Angled long design specially for engines with deep seating of the spark plugs
- For almost all common vehicle types
- Pipe part slotted to ensure optimal guidance of the cable without damage
- For damage-free removal and insertion of spark plug connectors, even when the engine is warm
- With suspension hole
- 1 piece handle
- Special steel



	L mm	U
500.7530	280.0	90



IGNITION COIL PULLER

T-handle ignition coil puller for VAG engines

- Ideal for the fast and safe assembly and removal of ignition coils with power output stage
- Prevents damage to the coil and on the housing
- With suspension hole
- 1 piece handle
- Matt chrome
- Chrome vanadium

Application range: 6 cylinder 24 V and 5 cylinder engines, Golf/Bora from 1998, Passat/Touareg from 1997, Sharan from 1998, Phaeton/Touareg 6 cylinder from 2003, Transporter T5 6 cylinder injection from 2004; Audi direct injection A3 from 04, 2.0 l, A4 from 02, 2.0 l, A5 from 08 3.2 l and 4.2 l, A6 from 05, 3.2 l, A8 from 03, 3.2 l - 4.2 l and 5.2 l, TT from 07, 1.8 l and 2.0 l, R8 from 08, 4.2 l, Q5 from 08, 2.0 l and 3.2 l, Q7 from 07, 3.6 l and 4.2 l



	Fork opening mm	L mm	U
500.7545	18.0	135.0	130

T-handle ignition coil puller VAG engines

- Ideal for the fast and safe assembly and removal of ignition coils with power output stage
- Prevents damage to the coil and on the housing
- With suspension hole
- 1 piece handle
- Matt chrome
- Chrome vanadium

Application range: 6 cyl. (4V) and 5 cyl. petrol injection engines Volkswagen FSI engines: Golf/Bora from 1998, Polo from 2002, Touran, Touareg, Sharan from 2004, New Beetle from 2003, Passat from 1997, Phaeton, T4, T5 + Audi A2 from 2001



	Fork opening mm	L mm	U
500.7540	26.0	135.0	150

T-handle ignition coil puller VAG engines

- Ideal for the fast and safe assembly and removal of ignition coils with power output stage
- Prevents damage to the coil and on the housing
- With suspension hole
- 1 piece handle
- Matt chrome
- Chrome vanadium

Application range: Volkswagen direct injection 2.0: Golf + Touran from 2004, Passat + Eos + Tiguan from 2008, Polo from 2002 4 cyl. 5V, Scirocco from 2009 1.8 l and 2.0 l, Phaeton from 2003 8 cyl., Audi direct injection A3 from 2004 2.0 l, A4 from 2002 2.0 l, A5 3.2 l and S5/RS5 4.2 l + R8 4.2 l + Q5 2.0 l and 3.2 l from 2008, A6 3.2 from 2005, A8 3.2 l and 4.2 l + S8 5.2 l from 2003, TT 1.8 l and 2.0 l + Q7 3.6 l and 4.2 l from 2007



	Fork opening mm	L mm	U
500.7550	44.0	105.0	200

Ignition coil puller VAG engines

- Ideal for the fast and safe assembly and removal of ignition coils with power output stage
- Prevents damage to the coil and on the housing
- With finger pull ring
- Matt chrome
- Chrome vanadium

Application range: For 1.8 l turbo petrol injection engines with engine code: ARZ, AQA, AUM, AUQ e.g. for Audi A3 2.0 l from 2004, A6 3.2 l from 2005, TT, Volkswagen direct injection 2.0: Golf + Touran from 2004, Passat + Eos from 2006 AUDI direct injection: A3 2.0 l from 2004, A6 3.2 l from 2005



	Fork opening mm	L mm	U
500.7555	44.0	90.0	100



T-handle ignition coil puller set for VAG engines

- Ideal for the fast and safe assembly and removal of ignition coils with power output stage
- Prevents damage to the coil and on the housing
- Covers almost all models of VAG and Audi engines
- With suspension hole
- 1 piece handle
- Matt chrome
- Chrome vanadium
- In durable plastic storage case



Part No.	Quantity	Description	Weight (kg)
500.7560	4 pcs	T-handle ignition coil puller set for VAG engines	600

consists of:

Part No.	Description	Weight (kg)
500.7540	T-handle ignition coil puller VAG engines	150
500.7545	T-handle ignition coil puller for VAG engines	130
500.7550	T-handle ignition coil puller VAG engines	200
500.7555	Ignition coil puller VAG engines	100

SPARK PLUG CONNECTOR PLIERS

Spark plug connector pliers, short

- Short design
- Universal usage
- 10° angled gripper sleeves
- Secure handling thanks to gripper sleeves with milled inner profil
- Short plier arms
- For damage-free removal and insertion of spark plug connectors, even when the engine is warm
- With two component handle
- Chrome vanadium



Part No.	Ø mm	L mm	Weight (kg)
500.7532	8,0-15,0	220,0	260

Spark plug connector pliers, long

- Long, angular gripper sleeves
- Gripping sleeves with milled inner profil
- Long plier arms
- Wide safety margin to the hot assembly
- For extracting low lying spark plugs
- With two component handle
- Chrome vanadium



Part No.	Ø mm	L1 mm	L2 mm	L3 mm	Weight (kg)
500.7510	8,0-15,0	290,0	145,0	50,0	280

Spark plug connector pliers, long

- Long design specially for engines with deep seating of the spark plugs
- Universal usage
- Ideal for heat protection connectors
- 90° angled gripper sleeves
- Secure handling thanks to plier tips with milled inner profil
- Very long plier arms
- Wide safety clearance to the hot unit
- For damage-free removal and insertion of spark plug connectors, even when the engine is warm
- With PVC dipped handle
- Chrome vanadium



Part No.	Ø mm	L mm	Weight (kg)
500.7501	7,9	295,0	336

Spark plug connector double joint pliers, long

- Long design specially for engines with deep seating of the spark plugs
- Universal usage
- Ideal for heat protection connectors
- Double joint means the pliers require less space to open and grab
- 45° angled gripper sleeves
- Secure handling thanks to plier tips with milled inner profil
- Very long plier arms
- Wide safety clearance to the hot unit
- For damage-free removal and insertion of spark plug connectors, even when the engine is warm
- With PVC dipped handle
- Chrome vanadium



Part No.	Ø mm	L mm	Weight (kg)
500.7566	8,0	320,0	400

Spark plug connector pliers, short

- Short design
- Universal usage
- Ideal for heat protection connectors
- 45° angled gripper sleeves
- Secure handling thanks to plier tips with milled inner profil
- Short plier arms
- For damage-free removal and insertion of spark plug connectors, even when the engine is warm
- With two component handle
- Chrome vanadium



Part No.	Ø mm	L mm	Weight (kg)
500.7533	9,0	190,0	220

Spark plug connector pliers, long

- Long design specially for engines with deep seating of the spark plugs
- Universal usage
- 90° angled gripper sleeves
- Secure handling thanks to gripper sleeves with milled inner profil
- Very long plier arms
- Wide safety clearance to the hot unit
- For damage-free removal and insertion of spark plug connectors, even when the engine is warm
- With PVC dipped handle
- Chrome vanadium



Part No.	Ø mm	L1 mm	L2 mm	Weight (kg)
500.7504	12,0	285,0	65,0	315

Spark plug connector double joint pliers, long

- Long design specially for engines with deep seating of the spark plugs
- Universal usage
- Ideal for heat protection connectors
- Double joint means the pliers require less space to open and grab
- 45° angled gripper sleeves
- Secure handling thanks to plier tips with milled inner profil
- Very long plier arms
- Wide safety clearance to the hot unit
- For damage-free removal and insertion of spark plug connectors, even when the engine is warm
- With PVC dipped handle
- Chrome vanadium



Part No.	Ø mm	L mm	Weight (kg)
500.7567	13,0	320,0	400

Spark plug connector pliers set

- For removing and inserting difficult to access spark plug connectors
- Requires less space when opening due to double joint
- For all engine temperatures
- 45° angled
- Long design
- PVC dipped handle



500.7565	2 pcs	Spark plug connector pliers set	800
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consists of:

500.7566	Spark plug connector double joint pliers, Ø 8.0 mm, long	400
500.7567	Spark plug connector double joint pliers, Ø 13.0 mm, long	400

STANDARD NUT SOCKETS FOR SPARK PLUGS

T-handle spark plug spanner with joint

- 6-point
- Universal usage
- with joint
- With rubber stop for holding the spark plugs
- Chrome plated and mirror polished
- Chrome vanadium

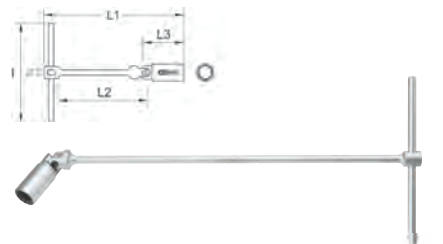


mm	mm	L mm	kg
517.1170	16.0	5/8"	235.0
517.1175	21.0	13/16"	280



T-handle spark plug spanner with joint, long

- 12-point
- Double hexagon profile allows the pickup of hexagon and 12-point spark plugs
- Long design specially for engines with deep seating of the spark plugs
- Universal usage
- with joint
- With rubber stop for holding the spark plugs
- Matt finish
- Chrome vanadium



Profile	mm	L mm	L1 mm	L2 mm	L3 mm	kg
517.1131	14.0	200.0	500.0	418.5	81.5	490
517.1132	16.0	200.0	500.0	418.5	81.5	500
517.1133	18.0	200.0	500.0	418.5	81.5	580
517.1134	21.0	200.0	500.0	418.5	81.5	590

T-handle spark plug spanner set with joint, long

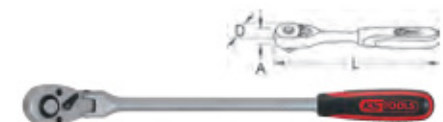
- 12-point
- Double hexagon profile allows the pickup of hexagon and 12-point spark plugs
- Long design specially for engines with deep seating of the spark plugs
- Universal usage
- with joint
- With rubber stop for holding the spark plugs
- Matt finish
- Chrome vanadium



517.1130	4 pcs	14 - 16 - 18 - 21 mm	2.42
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Flexible head reversible ratchet

- According to DIN 3122 / ISO 3315
- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- 180° revolving head
- Reversible
- Exact gearing 72 teeth ratchet mechanism
- Ejection mechanism on the ratchet head
- Ergonomic dual component handle
- Recessed reverse lever
- Matt finish
- Chrome vanadium



Profile	A mm	D mm	L mm	Repair set	kg
914.3896	16.0	30.0	275.0	914.3897	260

CHROMEplus® flexible head reversible ratchet with cranked shaft

- According to DIN 3122 / ISO 3315
- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- 180° revolving head
- Cranked shaft
- Reversible
- Fine gearing 72 teeth ratchet mechanism
- Ejection mechanism on the ratchet head
- Ergonomic dual component handle
- Lightweight recessed reverse lever
- Chrome plated and mirror polished
- Chrome vanadium



3/8"

Profile	A mm	D mm	L mm	Repair set	kg
918.3895	16.0	30.0	275.0	914.3897	230

Telescopic spark plug socket, adjustable length

- 6-point
- Length adjustable to 146 / 161 / 176 / 191 / 206 mm
- Long design if required for engines with deep seated spark plugs
- Universal usage
- With rubber stop for holding the spark plugs
- Internal square in accordance with DIN 3120/ISO 1174
- For manual operation
- Matt finish
- Chrome vanadium



3/8"

Profile	mm	L mm	kg
500.3801	14.0	146/161/176/191/206	240
500.3802	16.0	146/161/176/191/206	250
500.3803	21.0	146/161/176/191/206	260

Spark plug socket with joint, long

- 12-point
- Double hexagon profile allows the pickup of hexagon and 12-point spark plugs
- Very long design specially for engines with deep seated spark plugs
- Universal usage
- with joint
- With rubber stop for holding the spark plugs
- Internal square drive to DIN 3120/ISO 1174
- Matt finish
- Chrome vanadium



1/2"

Profile	mm	L1 mm	L2 mm	L3 mm	kg
517.1191	14.0	500.0	418.5	81.5	370
517.1192	16.0	500.0	418.5	81.5	380
517.1193	18.0	500.0	418.5	81.5	390
517.1194	21.0	500.0	418.5	81.5	400



Spark plug socket

- 6-point
- DIN 3124/ISO 3315
- FlankTraction-Profil
- Internal square to DIN 3120/ISO 1174 with ball reception
- With rubber stop for holding the spark plugs
- Long design
- For manual operation
- Matt finish
- Chrome vanadium



	Profile	mm	D1 mm	D2 mm	L mm	U
911.3804		16,0	20,0	18,0	63,0	60
911.3823		18,0	26,0	21,0	63,0	135
911.3805		21,0	22,0	19,0	63,0	60
911.3909		5/8"	22,0	20,0	63,0	60
911.3908		13/16"	27,0	20,0	63,0	60

CHROMEplus® Spark plug socket

- 6-point
- DIN 3124/ISO 3315
- FlankTraction-Profil
- Internal square to DIN 3120/ISO 1174 with ball reception
- With rubber stop for holding the spark plugs
- Long design
- For manual operation
- Chrome plated and mirror polished
- Chrome vanadium



	Profile	mm	D1 mm	D2 mm	L mm	U
918.3804		16,0	22,0	19,0	63,0	60
918.3805		18,0	26,0	20,0	63,0	60
918.3806		21,0	28,0	21,0	63,0	60
918.3991		13/16"	27,0	20,0	63,0	60
918.3992		5/8"	22,0	20,0	63,0	60

Special spark plug socket, extremely thin walled

- 12-point
- Double hexagon profile all ws the pickup of hexagon and 12-point spark plugs
- Extra slim design
- For spark plugs with platinum electrodes for example Bosch 14 ZR
- With rubber stop for holding the spark plugs
- Internal square in accordance with DIN 3120/ISO 1174
- For manual operation
- Matt finish
- Chrome vanadium

Application range: BMW E90 N 54 engine 335i from 2006, 1 Series (F20) 118i
 Renault Modus, Twingo, Clio, Kangoo with 1.2 l 16V engine
 Peugeot 207, 307
 Citroën C4 1.4 and 1.6 l 16V engine, C5 2.0 l HPI engine
 Mercedes Motor M156, engine M 276
 Nissan Micra, Note
 MINI 1.2 - 1.4 l 4 cyl from 2007
 FORD 1.0 EcoBoost engine
 Alfa 1.8 TBI engine
 KIA



	Profile	mm	D1 mm	D2 mm	L mm	U
911.3990		14,0	26,0	20,0	63,0	60

CHROMEplus® special spark plug socket, extremely thin walled

- 12-point
- Double hexagon profile all ws the pickup of hexagon and 12-point spark plugs
- Extra slim design
- For spark plugs with platinum electrodes for example Bosch 14 ZR
- With rubber stop for holding the spark plugs
- Internal square in accordance with DIN 3120/ISO 1174
- For manual operation
- Chrome plated and mirror polished
- Chrome vanadium

Application range: BMW E90 N 54 engine 335i from 2006, 1 Series (F20) 118i
 Renault Modus, Twingo, Clio, Kangoo with 1.2 l 16V engine
 Peugeot 207, 307
 Citroën C4 1.4 and 1.6 l 16V engine, C5 2.0 l HPI engine
 Mercedes Motor M156, engine M 276
 Nissan Micra, Note
 MINI 1.2 - 1.4 l 4 cyl from 2007
 FORD 1.0 EcoBoost engine
 Alfa 1.8 TBI engine
 KIA



	Profile	mm	D1 mm	D2 mm	L mm	U
918.3990		14	20,0	18,0	63,0	60

Special spark plug socket, thin walled

- 12-point
- Double hexagon profile all ws the pickup of hexagon and 12-point spark plugs
- Extra slim design
- For spark plugs with platinum electrodes for example Bosch 14 ZR
- With rubber stop for holding the spark plugs
- Internal square in accordance with DIN 3120/ISO 1174
- For manual operation
- Matt finish
- Chrome vanadium

Application range: BMW E90 N 54 engine 335i from 2006, 1 Series (F20) 118i
 Renault Modus, Twingo, Clio, Kangoo with 1.2 l 16V engine
 Peugeot 207, 307
 Citroën C4 1.4 and 1.6 l 16V engine, C5 2.0 l HPI engine
 Mercedes Motor M156, engine M 276
 Nissan Micra, Note
 MINI 1.2 - 1.4 l 4 cyl from 2007
 FORD 1.0 EcoBoost engine
 Alfa 1.8 TBI engine
 KIA



	Profile	mm	Total length mm	D mm	U
911.3991		14,0	64,0	18,0	60

Special spark plug socket with joint

- 12-point
- Double hexagon profile all ws the pickup of hexagon and 12-point spark plugs
- Extra slim design
- with joint
- With rubber stop for holding the spark plugs
- For manual operation
- Matt finish
- Chrome vanadium



	Profile	mm	D mm	L mm	T mm	U
911.3999		14,0	19,0	92,0	19,5	110



Spark plug socket, long

- 12-point
- Double hexagon profile allows the pickup of hexagon and 12-point spark plugs
- Long design specially for engines with deep seating of the spark plugs
- Universal usage
- Extra slim design
- With strong, integrated magnets for holding the spark plugs
- Internal square in accordance with DIN 3120/ISO 1174
- For manual operation
- Matt finish
- Chrome vanadium

Application range: Citroën C5 (HPI); Peugeot 207,308 (1.6 16V); 406 (HPI); Mini One 1.4 I; Renault Clio (1.2 16V); Twingo (1.2 16V); Volkswagen-16 valve; Mazda 626, 2.0 I, 1.6 valve with DOHC engine from 87; Mazda 323, 1.6 I and 1.9 I from 89; MX 5, 1.6 I from 90



3/8"

	Profile	mm	L mm	mm
517.1143		14,0	250,0	300
517.1141		16,0	250,0	360
517.1142		21,0	250,0	560

CHROMEplus® spark plug service set

- Chrome plated and mirror polished
- Chrome vanadium
- In durable plastic case



3/8"

			mm
918.0607	7 pcs	CHROMEplus® spark plug service set	1,44

consists of:

		mm
918.3802	3/8" CHROMEplus® Wobble-Extension, knurled Length 150 mm	145
919.3804	3/8" CHROMEplus® LOKPLUS lengthener with lock, 150 mm	140
918.3990	3/8" CHROMEplus® Spark plug-Socket, 14 mm, 12 point	60
918.3804	3/8" CHROMEplus® Spark plug-Socket, 16 mm, 6 point	60
918.3805	3/8" CHROMEplus® Spark plug-Socket, 18 mm, 6 point	60
918.3806	3/8" CHROMEplus® Spark plug-Socket, 21 mm, 6 point	60
918.3895	3/8" CHROMEplus® Flexible-Reversible ratchet, 72 teeth, Length 270 mm	230

SPARK PLUG SCREWING AID

Spark plug screw in tool, double sided

- For universal applications spark plug and glow plugs
- For the clean and preparing of the first thread gears
- Especially in common rail glow plugs
- Double sided usage
- Solid rubber



	L mm	mm
500.7520	240,0	75

TORQUE TOOLS

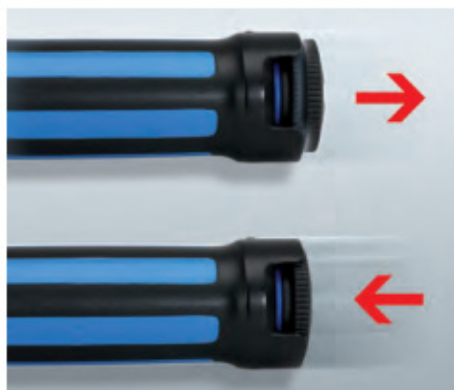
ERGOTORQUE® precision torque wrench with rotary mushroom ratchet head

- Actuation accuracy: $\pm 3\%$ tolerance of the set scale value
- Precise reading accuracy for a minimum 5.000 tightening cycles
- For controlled fastening in clockwise and counter clockwise directions
- Torque setting by pulling out and pushing in the slide in knob at the end of the handle
- The direction of rotation (clockwise and counter clockwise) can be changed by simply rotating the square drive piece
- Double scale in N·m and lb·ft divisions for precise adjustment
- Includes micrometer scale in N·m divisions for precise and fine adjustment
- Large vision panel, precise adjustment using a magnifying glass
- An audible and palpable signal when the desired torque value is achieved
- Exact gearing 72 teeth ratchet mechanism
- Torque setting is quick and easy using the locking knob in the handle end
- Secure locking function within the handle
- Two component handle with a soft zone, is ergonomic in design and comfortable in the hand
- Square drive adaptor to DIN 3120 - ISO 1174 with ball lock
- Individually marked with serial number unique product identification
- Includes test certificate in accordance with DIN EN ISO 6789:2003 national standard



3/8"

	N·m	English Unit	lb·ft	L mm	D mm	H mm	mm
516.1422	3/8"	5-50	0.25	4 - 37	350,0	45,0	23,0 0,61



Torque limiter adaptor set

- High accuracy
- For controlled fastening in a clockwise direction with 18 Nm or 24 Nm
- Clearly perceptible torque through the ratchet
- It is not possible to over tighten the set value
- Without scale - with a fixed adjustable value
- Can untighten without any torque restraint thanks to the anticlockwise latch
- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- In durable steel storage case



			mm
516.1500	2 pcs	18 - 24 Nm	410

consists of:

		mm
516.1501	3/8" torque limiter for spark plugs, 18 Nm	165
516.1502	3/8" torque limiter for spark plugs, 24 Nm	166

Torque limiter spark plug socket set

- For the controlled screwing of sparks plugs
- Includes 2 magnetic 250 mm long sparks plug socket
- High accuracy
- For controlled fastening in a clockwise direction with 18 Nm or 24 Nm
- Clearly perceptible torque through the ratchet
- It is not possible to over tighten the set value
- Without scale - with a fixed adjustable value
- Can untighten without any torque restraint thanks to the anticlockwise latch
- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- In durable steel storage case



		mm	
517.1140	5 pcs	Torque limiter spark plug socket set	2,07

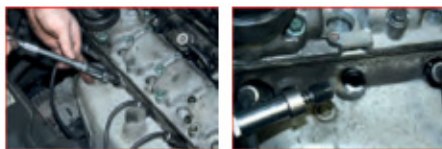
consists of:

		mm
516.1501	3/8" torque limiter for spark plugs, 18 Nm	165
516.1502	3/8" torque limiter for spark plugs, 24 Nm	166
517.1141	3/8" spark plug socket, long 16 mm	360
517.1142	3/8" spark plug socket, long 21 mm	560
918.3890	3/8" CHROME changeover ratchet, 72 teeth	130

REAMER FOR CLEANING

Special thread cleaner with integrated seal seat milling tool

- Ideal for cleaning the internal thread of the spark plugs on the cylinder head
- Optimum cleaning of the spark plug seat using a compression spring with integrated seal seat milling tool
- Simple handling
- Internal square drive to DIN 3120/ISO 1174
- External hexagon drive
- Special steel



	mm		
150.5017	M14 x 1,25	1/2"	60
150.5016	M16 x 1,25	1/2"	65
150.5018	M18 x 1,5	1/2"	70

SPARK PLUG THREAD REPAIR

THREADfix repair set M12 x 1.25 for glow and spark plugs

- Unique assortment for the repair of worn or damaged threads
- Ideal for spark plugs and glow plugs
- Simple handling and correct repair
- Provides an entirely firm and a slight seat of the inserts
- Extremely thin walled inserts with rustproofing protection
- Includes thread tap and assembly tool
- Fast repair option without costly warehousing of components
- In durable plastic storage case

M12 x 1.25 x 120 mm
M12 x 1.25 x 130 mm
M12 x 1.25 x 150 mm



150.5060	21 pcs	THREADfix repair set M12 x 1.25 for glow and spark plugs	920

consists of:

150.5061	Threaded drill with guide pin	M12 x 1.25	47
150.5062	Threaded drill with guide pin	M14 x 1.25	53
150.5063	Reamer for guide pin		52
150.5064	Screw for Bushes (S)	L= 89 mm, M12 x 1.5, GL= 108 mm	230
150.5068	Screw for Bushes (M)	L= 95 mm, M12 x 1.25, GL= 114 mm	238
150.5069	Screw for Bushes (L)	L= 103 mm, M12 x 1.25, GL= 122 mm	246
150.5077	Threaded bush with collar	L=12 mm, IG=M12x1.25 / AG=M14x1.25 (5 per Pack)	20
150.5078	Threaded bush with collar	L=19 mm, IG=M12x1.25 / AG=M14x1.25 (5 per Pack)	20
150.5079	Threaded bush with collar	L=26 mm, IG=M12x1.25 / AG=M14x1.25 (5 per Pack)	20

Spark plug thread repair set M14 x 1,25 for spark plugs

- Proven and sturdy repair system for spark plug threads that have been torn out or damaged (e.g. in light alloy cylinder heads).
- Greatly cuts down on time and money as the repair can be carried out without having to remove the cylinder head.
- Thanks to the special tap, the remains of the old thread are cleared out and the new thread cut in one process.
- The threaded inserts are seated very firm and gas-tight.
- They cannot unscrew during subsequent plug changes.
- The special steel threaded inserts have extremely thin walls and feature a rust protection layer (M14x1.25 inner thread / M16x1.25 outer thread).
- Delivery includes inserts for tapered seating seats (without seal ring), e.g. Ford, Peugeot, MB etc.
- In durable plastic storage case



150.1280	16 pcs	Spark plug thread repair set M14 x 1,25 for spark plugs	200

consists of:

150.1281	Tap, M16 x 1,25 mm		80
150.1282	Tap adaptor, M14 x 1,25 mm, 11,2 mm		20
150.1283	Tap adaptor, M14 x 1,25 mm, 17,5 mm		40
150.1284	Tap adaptor/for tapered seating seat		40

THREADfix repair set M14 x 1.25 for spark plugs

- Unique assortment for the repair of worn or damaged threads
- Ideal for spark plugs
- Simple handling and correct repair
- Provides an entirely firm and a slight seat of the inserts
- Extremely thin walled inserts with rustproofing protection
- Includes thread tap and assembly tool
- Fast repair option without costly warehousing of components
- In durable plastic storage case

M14 x 1.25 x 120 mm
M14 x 1.25 x 135 mm



150.5080	21 pcs	THREADfix repair set M14 x 1.25 for spark plugs	1.16

consists of:

150.5081	Threaded tap	M14 x 1.25 L=70 mm	59
150.5082	Threaded tap	M16 x 1.25 L= 70 mm	74
150.5083	Reamer	L= 70 mm	71
150.5084	Screw for Bushes (S)	L= 90 mm, M14 x 1.25, GL= 109 mm	343
150.5085	Threaded bushing with collar	L = 11.2 mm, IG = M14 x 1.25/AG = M16 x 1.25 (10 per pack)	41
150.5086	Threaded bushing with collar	L = 17.5 mm, IG = M14 x 1.25/AG = M16 x 1.25 (10 per pack)	64
150.5087	Threaded bushing with cone	L = 17.5 mm, IG = M14 x 1.25/AG = M16 x 1.25 (10 per pack)	62
150.5088	Screw for Bushes (S)	L= 90 mm, M14 x 1.25, GL= 117 mm	355

Stainless steel thread repair set for spark plug threads M14 x 1,25 mm

- Unique assortment for the repair of worn or damaged threads
- Ideal for spark plugs
- Simple handling and correct repair
- Provides an entirely firm and a slight seat of the inserts
- Extremely thin walled inserts made from stainless steel
- Includes thread tap and assembly tool
- Fast repair option without costly warehousing of components
- In durable steel storage case



150.6140	17 pcs	Stainless steel thread repair set for spark plug threads M14 x 1,25 mm	457

consists of:

150.6141	Threaded insert	M14 x 1.25, 16.4 mm, 5 pcs.	16
150.6142	Threaded insert	M14 x 1.25, 12.4 mm, 5 pcs.	12
150.6143	Threaded insert	M14 x 1.25, 8.4 mm, 5 pcs.	7
150.6144	Threaded tap/flaring tool	M14 x 1.25	72
150.6145	Mounting tool	for M14 x 1.25	80

SPARK PLUG THREAD CUTTING TOOLS

Special hand thread cutter, extra long

- For cleaning and re-cutting M12 x 1.25 spark plug or glow plug threads
- Special length for deep seated thread
- Quick and easy thread repair

Application range:

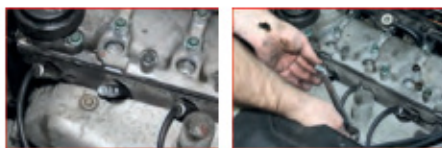
- M8 x 1.0: Opel, Fiat, Mercedes, etc.
- M9 x 1.0: Opel, Fiat, etc.
- M10 x 1.0: Audi/Volkswagen, Seat, Škoda, Ford, Mercedes, BMW, etc.
- M10 x 1.25: Audi/Volkswagen, Seat, Škoda, Ford, etc.
- M14 x 1.25: Audi/Volkswagen, Opel, Mercedes, Seat, Škoda, BMW, etc.



		mm	Length mm	
150.5011	M8 x 1.0	5.5	200.0	80
150.5012	M9 x 1.0	5.5	200.0	80
150.5013	M10 x 1.0	5.5	200.0	85
150.5014	M10 x 1.25	5.5	200.0	85
150.5015	M14 x 1.25	9.0	200.0	90

Spark plug thread cutting tool M14 x 1.25

- For cleaning and re-cutting M14 x 1.25 glow plug threads
- Simple handling due to eccentric function
- Special length for deep seated thread
- Quick and low-cost thread repair
- Centring shaft
- With conical mounting shaft for thread repair sleeves
- With external hexagon drive
- With knurled knob



	mm	mm	mm	kg
150.6505	M14 x 1.25	13.0	140.0	120
150.6506	M14 x 1.25	13.0	270.0	280

Glow plug and spark plug thread cutting tool set

- For cleaning and re-cutting M12 x 1.25 spark plug or glow plug threads
- Simple handling due to eccentric function
- Special length for deep seated thread
- Quick and low-cost thread repair
- Centring shaft
- With conical mounting shaft for thread repair sleeves
- With external hexagon drive
- With knurled knob
- In durable plastic storage case

Application range: BMW, Mini, Citroën, Peugeot, Renault, Mercedes, Volkswagen, etc.



	pcs		kg
150.6500	7	Glow plug and spark plug thread cutting tool set	1.40

consists of:

		kg
150.6501	Thread cutting tool, M8 x 1.0, 115 mm	80
150.6502	Thread cutting tool, M10 x 1.0, 115 mm	100
150.6503	Thread cutting tool, M12 x 1.25, 140 mm	120
150.6504	Thread cutting tool, M12 x 1.25, 270 mm	280
150.6505	Thread cutting tool, M14 x 1.25, 140 mm	120
150.6506	Thread cutting tool, M14 x 1.25, 270 mm	280
150.6507	Thread cutting tool, M18 x 1.5, 90 mm	100

CONTACT CLEANING

Steel wire spark plug wire brush 2 rowed

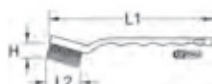
- 2-rowed
- For delicate cleaning of electrodes and contacts on spark plugs
- For surface preparation
- Steel wire



	H mm	L1 mm	L2 mm	kg
201.2315	14.8	170.0	24.5	20

Brass wire spark plug wire brush 2 rowed

- 2-rowed
- For delicate cleaning of electrodes and contacts on spark plugs
- For surface preparation
- Brass wire



	H mm	L1 mm	L2 mm	kg
201.2316	14.8	170.0	24.5	20

Contact file or spark plug contacts

- For delicate cleaning of spark plug contacts
- Second cut
- For surface preparation
- Special steel



	mm	mm	mm	kg
201.2330	2	150.0	8.0	5



MASTER cleaning brush set

- For cleaning and deburring threads, cylinders, connectors, pipes and other components with nylon, brass and steel edging
- With external hexagon drive to DIN 3126/ISO 1173 - C 6.3
- With locking and quick-change mechanism on the handle grip and extension
- Can be used by hand or with an electric screwdriver
- Can be used with an electric screwdriver in a clockwise direction
- Nickel plated
- In durable plastic storage case

Application range: For cleaning all types of thread, spreader bar seals on injection lines of cylinder heads, brake calliper sliding sleeves, O-ring entries, injector seal seats, valves of exhaust gas recirculation systems, inlet and outlet openings, etc.



	pcs		kg
340.0010	38	MASTER cleaning brush set	1.43

consists of:

		kg
340.0061	1/4" handle with quick action lock	71
340.0062	1/4" extension with quick action lock	51
340.0063	1/4" brass brush Ø 8 mm	15
340.0064	1/4" brass brush Ø 9 mm	15
340.0065	1/4" brass brush Ø 10 mm	15
340.0066	1/4" brass brush Ø 11 mm	16
340.0067	1/4" brass brush Ø 12 mm	16
340.0068	1/4" brass brush Ø 13 mm	16
340.0069	1/4" brass brush Ø 14 mm	17
340.0070	1/4" brass brush Ø 15 mm	17
340.0071	1/4" brass brush Ø 16 mm	17
340.0072	1/4" brass brush Ø 17 mm	18
340.0073	1/4" brass brush Ø 18 mm	18
340.0074	1/4" brass brush Ø 19 mm	18
340.0075	1/4" steel brush Ø 8 mm	15
340.0076	1/4" steel brush Ø 9 mm	15
340.0077	1/4" steel brush Ø 10 mm	15
340.0078	1/4" steel brush Ø 11 mm	15
340.0079	1/4" steel brush Ø 12 mm	16
340.0080	1/4" steel brush Ø 13 mm	16
340.0081	1/4" steel brush Ø 14 mm	17
340.0082	1/4" steel brush Ø 15 mm	17
340.0083	1/4" steel brush Ø 16 mm	17
340.0084	1/4" steel brush Ø 17 mm	17
340.0085	1/4" steel brush Ø 18 mm	18
340.0086	1/4" steel brush Ø 19 mm	18
340.0087	1/4" nylon brush Ø 8 mm	15
340.0088	1/4" nylon brush Ø 9 mm	15
340.0089	1/4" nylon brush Ø 10 mm	15
340.0090	1/4" nylon brush Ø 11 mm	15
340.0091	1/4" nylon brush Ø 12 mm	15
340.0092	1/4" nylon brush Ø 13 mm	15
340.0093	1/4" nylon brush Ø 14 mm	15
340.0094	1/4" nylon brush Ø 15 mm	15
340.0095	1/4" nylon brush Ø 16 mm	15
340.0096	1/4" nylon brush Ø 17 mm	15
340.0097	1/4" nylon brush Ø 18 mm	15
340.0098	1/4" nylon brush Ø 19 mm	15

SENSOR AND THREAD GAUGES

Feeler gauge

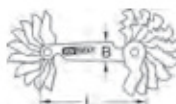
- For the testing of intervals, contact distances, etc.
- Feeler gauge conical tapered
- Fixing nut
- Leaves individually marked with size
- Blades made out of hardened spring steel



Tool part	Measuring range mm	L mm	W
300.0600	20 0,05-0,10-0,15-0,20-0,25-0,30-0,35-0,40-0,45-0,50-0,55-0,60-0,65-0,70-0,75-0,80-0,85-0,90-0,95-1,00	100,0	88

Thread gauge

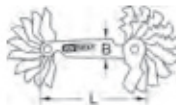
- For controlling and increasing the interior thread and outside thread
- Imperial sizes
- Cylindrical tapered
- Leaves fan shaped arrangement
- Leaves individually marked with size
- Out of hardened spring steel



Tool part	Measuring size	B mm	L mm	W
301.0090	22 4-4,5-5-6-7-8-9-10-11-12-13-14-16-18-20-22-24-32-40-48-56-64mm	12,2	66,5	40

Thread gauge

- For controlling and increasing the interior thread and outside thread
- Metric sizes
- Cylindrical tapered
- Leaves fan shaped arrangement
- Leaves individually marked with size
- Out of hardened spring steel



Tool part	Measuring size	B mm	L mm	W
301.0095	20 0,40-0,45-0,50-0,60-0,70-0,75-0,80-1,00-1,25-1,50-1,75-2,00-2,50-3,00-3,50-4,00-4,50-5,00-5,50-6,00mm	12,2	66,5	40

TEST DEVICE

Test spark plug

- For checking ignition systems
- No damage to control devices due to earth connection
- Universal usage
- On vehicles with DIS ignition systems 2 pieces are required



Length mm	W
550.1507	68,0 60



Test lamp for ignition cable

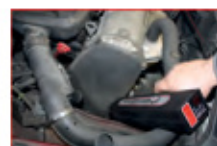
- For quickly finding defective ignition cables
- No piercing of the insulation, prevents contact with live wires
- Correct operation of the ignition cable is indicated by a light



Length mm	Cable length mm	W
550.1506	200,0 1200	40

Digital ignition timing gun (stroboscope) with LED display

- For checking and adjustment the ignition timing on petrol engines
- For 12 V systems on 2, 3, 4, 5, 6 and 8 cylinder engines
- For all current vehicles with high voltage ignition cable
- Specially for engines that have no angle marking on the belt pulley
- Can be used for 4-stroke distributor ignition systems, 2-stroke and dual spark ignition systems
- Extra bright Xenon lights through special lenses
- Internal power supply through crocodile clips
- Additional crocodile clip and inductive pliers for measuring rotation speed, dwell angle and voltage test
- Perfect adjustment of ignition from 0 to 60°
- Dwell angle test from 0 to 99.9% with conversion table
- Engine speed counter from 200 to 9999 rpm
- Voltage drop test
- Voltmeter
- Control dial on housing side for adjusting the flash delay
- Mode can be chosen using a push-button on the back of the housing



Length mm	Width mm	Height mm	W
550.1500	270,0 65,0	180,0	885



ENGINE - GLOW PLUGS



Innovation is
our mission!



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GLOW PLUG CONNECTOR PLIERS

Glow plug pliers

- Suitable for very firmly seated glow plugs
- For the expert installation and removal of glow plugs
- Specially milled plier profile for positive holding
- For difficult to access areas
- With two component handle
- Special tool steel

Application range: Modern diesel engines, e.g. Mercedes, BMW, Volkswagen-Audi



	A mm	L1 mm	L2 mm	Weight g
500.7330	0-125	265.0	95.0	400

Glow plug pliers, angled

- Glow plug-plier, angled
- Suitable for very firmly seated glow plugs
- For the expert installation and removal of glow plugs
- Specially milled plier profile for positive holding
- Angled head
- For difficult to access areas
- With two component handle
- Special tool steel

Application range: Modern diesel engines, e.g. Mercedes, BMW, Volkswagen-Audi



	A mm	L1 mm	L2 mm	Weight g
500.7310	0-105	235.0	120.0	400

Glow plug dismantling pliers

- With rubber dipped handle
- Serrated jaws
- Length wise mounted handle arranged at the plier jaw
- With self-opening mechanism
- In order to pull out the glow plugs from the glow plug canal in the cylinder head
- Allows the removal of firmly seated and difficult to access glow plug connectors
- Also possible to extract incomplete glow plugs
- Optimum power transmission with rotary and train movements
- Universal usage
- Special tool steel



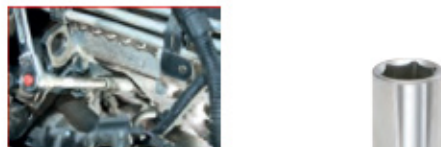
	A mm	L1 mm	L2 mm	Weight g
500.7335	0-35	260.0	40.0	290

STANDARD NUT SOCKETS FOR GLOW PLUGS

Glow plug special socket 8 mm

- 6-point
- For installing and removing the glow plugs
- For use on engines with glow plugs at the top of the cylinder head below the valve cover, standard flexible spanners cannot be used here
- FlankTraction profil
- Internal square to DIN 3120/ISO 1174 with ball reception
- Long design
- For manual operation
- Matt finish
- Chrome vanadium

Application range: Volkswagen-Audi 2.0 TDI engines (engine code: BKP, etc.) e.g. Volkswagen Passat 3C



	Weight mm	D1 mm	D2 mm	L mm	T mm	Weight g
917.3828	8.0	12.0	16.0	63.0	10.0	110

Glow plug special socket 10 mm

- 6-point
- For installing and removing the glow plugs
- Very narrow design
- FlankTraction profil
- Internal square to DIN 3120/ISO 1174 with ball reception
- Long design
- For manual operation
- Matt finish
- Chrome vanadium



	Weight mm	D1 mm	D2 mm	L mm	T mm	Weight g
500.1410	10.0	13.5	11.0	50.0	10.0	110

Glow plug special socket 10 mm

- 6-point
- For installing and removing the glow plugs
- For use on engines with glow plugs at the top of the cylinder head below the valve cover, standard flexible spanners cannot be used here
- FlankTraction profil
- Internal square to DIN 3120/ISO 1174 with ball reception
- Long design
- For manual operation
- Matt finish
- Chrome vanadium

Application range: 1.5 dCi engines (engine code: K9K) for Renault, Dacia, Nissan



	Weight mm	D1 mm	D2 mm	L mm	T mm	Weight g
917.3830	10.0	15.0	18.0	63.0	11.0	110

PSG glow plug socket 12 mm, incl. 5 PSG protection caps

- 6-point
- For the safe assembly and removal of PSG glow plugs
- Can also be used for removal/assembly of standard glow plug with 12 mm
- Supplied 5 PSG glow plug protective caps prevent electrostatic charging and contamination of the PSG glow plugs
- Integrated ball and outer ring for secure holding of the glow plug
- Breaking moment of the PSG glow plugs at 22 Nm
- Glow plugs must only be strained up to 12 Nm
- Internal square drive to DIN 3120/ISO 1174 with ball reception
- Matt finish
- Chrome vanadium

Application range: A4/S4 (Avant/Quattro) 3.0 I from 11/09; Q7 3.0 I from 11/08; Touareg 3.0 I from 02/09; Golf (Variant/4motion) 2.0 I from 09/09; Insignia (Sports Tourer) 2.0 CDTI from 03/09; Insignia (Bi Turbo) 2.0 CDTI from 07/08; Meriva B (CDTI) 1.3 I from 03/10; Astra J 1.3 I 03/10



	Weight mm	Replacement protective cap	Weight g
500.7345	12.0	500.7345-01	49

Special glow plug socket

- For the safe assembly and removal of glow plugs
- Socket with side slot
- Does not destroy the connector cable
- Simple handling
- For difficult to access areas
- External drive hexagonal socket 10.0 mm
- Simple handling
- Special steel

Application range: Alfa Romeo 147,156,159, GT; Fiat Bravo, Stilo; Opel Astra, Signum, Vectra-C, Zafira; Saab 93,95



	Weight mm	Length mm	Weight g
500.7351	8.0	50.0	20
500.7352	9.0	50.0	20
500.7353	10.0	50.0	20

Special glow plug socket set

- For the safe assembly and removal of glow plugs
- Socket with side slot
- Does not destroy the connector cable
- Simple handling
- For difficult to access areas
- Simple handling
- Special steel

Application range: Alfa Romeo 147,156,159, GT; Fiat Bravo, Stilo; Opel Astra, Signum, Vectra-C, Zafira; Saab 93,95



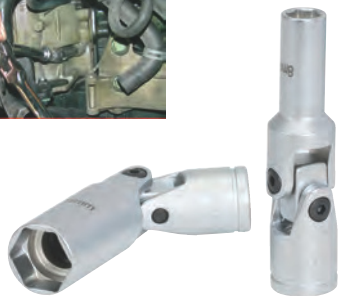
500.7350	3 pcs	Special glow plug socket set	120
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consists of:

500.7351	Special glow plug socket, 8 mm	20
500.7352	Special glow plug socket, 9 mm	20
500.7353	Special glow plug socket, 10 mm	20

Glow plug flexible socket

- 6 point
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Short execution
- For the safe disassembly and assembly of glow plugs
- For difficult to access areas
- Suitable for all current glow plugs
- Screwed universal joint
- Inclusive rubber rings for safe holding of the glow plug
- Matt finish
- Chrome vanadium



	mm	L mm	g
500.7301	8,0	75,0	70
500.7302	9,0	75,0	70
500.7303	10,0	75,0	70
500.7304	12,0	75,0	70
500.7305	14,0	80,0	80
500.7306	16,0	80,0	100

Glow plug flexible socket set

- 6 point
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Short execution
- For the safe disassembly and assembly of glow plugs
- For difficult to access areas
- Suitable for all current glow plugs
- Screwed universal joint
- Inclusive rubber rings for safe holding of the glow plug
- Matt finish
- Chrome vanadium



500.7300	6 pcs	Glow plug flexible socket set	610
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consists of:

500.7301	3/8" glow plug articulated socket, short, 75 mm, 8 mm	70
500.7302	3/8" glow plug articulated socket, short, 75 mm, 9 mm	70
500.7303	3/8" glow plug articulated socket, short, 75 mm, 10 mm	70
500.7304	3/8" glow plug articulated socket, short, 75 mm, 12 mm	70
500.7305	3/8" glow plug articulated socket, short, 75 mm, 14 mm	80
500.7306	3/8" glow plug articulated socket, short, 75 mm, 16 mm	100

Glow plug flexible socket, long

- 6 point
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Long execution
- For the safe disassembly and assembly of glow plugs
- For difficult to access areas
- Suitable for all current glow plugs
- Screwed universal joint
- Inclusive rubber rings for safe holding of the glow plug
- Matt finish
- Chrome vanadium



	mm	L mm	g
500.7311	8,0	150,0	190
500.7312	9,0	150,0	190
500.7313	10,0	150,0	190
500.7314	12,0	150,0	190
500.7315	14,0	160,0	190
500.7316	16,0	160,0	190

Glow plug swivel wrench set, long

- 6 point
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Long execution
- For the safe disassembly and assembly of glow plugs
- For difficult to access areas
- Suitable for all current glow plugs
- With screwed universal joint
- Inclusive rubber rings for safe holding of the glow plug
- Matt finish
- Chrome vanadium
- In durable plastic storage case



500.7320	6 pcs	Glow plug swivel wrench set, long	1.40
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consists of:

500.7311	3/8" glow plug articulated socket, long, 150 mm, 8 mm	190
500.7312	3/8" glow plug articulated socket, long, 150 mm, 9 mm	190
500.7313	3/8" glow plug articulated socket, long, 150 mm, 10 mm	190
500.7314	3/8" glow plug articulated socket, long, 150 mm, 12 mm	190
500.7315	3/8" glow plug articulated socket, long, 150 mm, 14 mm	190
500.7316	3/8" glow plug articulated socket, long, 150 mm, 16 mm	190

GLOW PLUG SCREWING AID

Spark plug screw in tool, double sided

- For universal applications spark plug and glow plugs
- For the clean and preparing of the first thread gears
- Especially in common rail glow plugs
- Double sided usage
- Solid rubber



	L mm	g
500.7520	240,0	75

TORQUE TOOLS

ERGOTORQUE® precision torque wrench with rotary mushroom ratchet head

- Actuation accuracy: $\pm 3\%$ tolerance of the set scale value
- Precise reading accuracy for a minimum 5.000 tightening cycles
- For controlled fastening in clockwise and counter clockwise directions
- Torque setting by pulling out and pushing in the slide in knob at the end of the handle
- The direction of rotation (clockwise and counter clockwise) can be changed by simply rotating the square drive piece
- Double scale in N-m and lbf-ft divisions for precise adjustment
- Includes micrometer scale in N-m divisions for precise and fine adjustment
- Large vision panel, precise adjustment using a magnifying glass
- An audible and palpable signal when the desired torque value is achieved
- Exact gearing 72 teeth ratchet mechanism
- Torque setting is quick and easy using the locking knob in the handle end
- Secure locking function within the handle
- Two component handle with a soft zone, is ergonomic in design and comfortable in the hand
- Square drive adaptor to DIN 3120 - ISO 1174 with ball lock
- Individually marked with serial number unique product identification
- Includes test certificate in accordance with DIN EN ISO 6789:2003 national standard



	N-m	lbf-ft	L mm	D mm	H mm	Weight
516.1422	3/8"	5-50	0.25	4	37	350.0

RATCHET RING SPANNER

Glow plug double ring ratcheting spanner, offset

- FlankTraction profil
- 45° angled
- Very narrow design
- Long design
- For installing and removing the glow plugs
- Ideal for use in difficult to access areas
- 8 mm for actuation of the power rails screw
- With stop for guiding the 8 mm nut
- 12 mm for actuation of the glow plugs
- Matt finish
- Chrome vanadium

Application range: Audi, BMW, Mercedes, Peugeot, Renault, Seat, Škoda, Volkswagen, etc.



	A1 mm	A2 mm	B1 mm	B2 mm	L mm	Weight
503.0812	8x12	11.0	11.0	26.0	21.0	300.0

Glow plug T-handle ring ratchet wrench

- 6 point
- T-handle
- For extremely heavily deposited glow plugs
- Right or left handed usage through the turning of the head
- Special steel

Application range: dim. 8 for electric cable nut in diesel motors (Volkswagen, Audi, Seat etc.) dim. 10 + 12 for glow plugs and hand brake adjustment



	mm	L mm	Weight
500.7340	8,0	295,0	175
500.7341	10,0	295,0	180
500.7342	12,0	300,0	195
500.7343	14,0	300,0	200

ELECTRODE HEAD EXTRACTION TOOL

Glow plug electrode head extraction tool

- Special profil
- For removing the electrode head or protruding central electrode
- For electrode diameters 2.5 - 3.5 - 4.0 mm
- Safe clamping due to rollers
- Internal square drive to DIN 3120/ISO 1174 with ball stop
- With external drive hexagonal socket 12.0 mm
- Special steel



	Ø mm	Outer Ø mm	L mm	Weight
500.1401	2,5	13,4	50,0	41
500.1402	3,5	13,4	50,0	41
500.1403	4,0	13,4	50,0	53



GLOW PLUG EXTRACTOR TOOLS

Glow plug extractor for CDI engines

- For turning off and pulling out the glow plugs from the glow plug canal in the cylinder head
- Removal of the cylinder head is not necessary for disassembly
- Can be used on glow plugs jammed by corrosion and/or soot coal
- Optimum power transmission with rotary and train movements
- Fits all glow plugs with hexagonal connector 10.0 mm
- Correct easy and damage free removal of the glow plug
- Chrome vanadium

Application range: Mercedes CDI engines OM 611, 612, 613



	Weight	L mm	Weight
152.1080	3/8"	190.0	315

Glow plug impact extraction set for CDI engines

- Ideal for unscrewed, but firmly seated glow plugs
- Can be used universally for M10 glow plugs
- Reaches into the electrical connection of the glow plugs with the support sleeve or impact hammer the glow plug is removed
- On engines for which the support sleeve cannot be used, the impact hammer is used
- Easy to fit
- Safe to use
- No sharp edges
- Saves a lot of time
- Special steel

Application range: Mercedes CDI engines OM 611, 612, 613



	Weight
700.1330	4 pcs Glow plug impact extraction set for CDI engines

consists of:

	Weight
700.1331	Special impact hammer
700.1332	Glow plug puller set, 3 pcs.

Glow plug puller for CDI engines

- Ideal for unscrewed, but firm y seated glow plugs
- Can be used universally for M10 glow plugs
- Reaches into the electrical connection of the glow plugs with the support sleeve or impact hammer the glow plug is removed
- Easy to fi
- Safe to use
- No sharp edges
- Saves a lot of time
- Special steel

Application range: Mercedes CDI engines OM 611, 612, 613, 646 (excluding 646 EVO), 647, 648, etc.



	Ø mm	L mm	Weight
152.1096	10,0	133,0	280

Glow plug service set

- For removing the glow plugs from the glow plug channel in the cylinder head
- Reamer for cleaning the glow plug channel in the cylinder head
- Removes deposits and carbonisation between glow plug and cylinder head
- Can be used for glow plugs jammed by corrosion and/or soot coal
- In durable plastic storage case

Application range: Reamer M10 x 1.00: Mercedes 4, 5 and 6 cylinder CDI engines, Smart CDI (660) reamer M12 x 1.25: Mercedes 4 valve technology engines (OM604/605/606) glow plug puller: Glow plugs 10.0 mm e.g. Mercedes CDI (OM 611/612/613)



	Weight
152.1095 3 pcs. Glow plug service set	596

consists of:

	Weight
152.1096 Glow plug extractor for dim. 10 mm	280
152.1097 Glow plug reamer M10 x 1.00:	50
152.1098 Glow plug reamer M12 x 1.25:	80

Glow plug vibration extractor set

- Ideal for loosening and extracting jammed glow plugs
- Especially suitable in glow plugs jammed by corrosion and/ or soot coal
- Produces controlled vibration impulse
- Suitable for all current glow plugs
- Loosening torque in 4 stages in accordance with manufacturer guidelines
- Extensive cost intensive repairs can be avoided through dismantling glow plugs
- Includes 1/4" coupling connector
- In durable steel storage case



Technical data:

Square drive:	1/4"
Max. tightening torque:	40 Nm
Max. loosening torque:	1 = 10 Nm 2 = 20 Nm 3 = 30 Nm 4 = 40 Nm
No load current:	7500 r.p.m.
Vibration:	< 2,69 ms ²
Noise performance level:	104 dbA
Noise pressure level:	88 dbA
Recommended torque:	42 Nm
Air consumption:	128 l/min
Operating pressure:	max. 6,3 (90 psi)
Max. screw size:	M16
Min. tube diameter:	3/8" - 10 mm
Connection thread:	1/4"PT

	Weight
152.1060 5 pcs. Glow plug vibration extractor set	1.80

consists of:

	Weight
152.1061 1/4" Vibration extractor 10-40 N·m	900
152.1062 1/4" Impact wrench socket long 8 mm	30
152.1063 1/4" Impact wrench socket long 10 mm	40
152.1064 1/4" Impact wrench socket long 12 mm	50
152.1065 1/4" Universal joint	40



REAMER FOR CLEANING

3 in 1 glow plug reamer M8 x 1.0

- Special reamer geometry cleans the glow plug shaft, sealing seat and glow rod channel in a single step
- For professional cleaning of glow plug channels in the cylinder head of sizes M8 x 1.0
- Removes deposits between the glow plugs and cylinder head
- Damage due to deep penetration and slipping of the reamer is prevented by fi able stoppers
- Includes a centring sleeve with thread of the corresponding glow plug
- Prior to fi ting new glow plugs it is recommended to clean the glow plug shafts
- Universal usage
- External hexagon drive 10.0 mm with milled manual drive head
- Multi-level reamer made out of one piece

Application range: For all vehicles with glow plugs of sizes M8 x 1.0



	Ø mm	Length mm	Weight
152.1121	M8x1,0	10	195,0

3 in 1 glow plug reamer M9 x 1.0

- Special reamer geometry cleans the glow plug shaft, sealing seat and glow rod channel in a single step
- For professional cleaning of glow plug channels in the cylinder head of sizes M9 x 1.0
- Removes deposits between the glow plugs and cylinder head
- Damage due to deep penetration and slipping of the reamer is prevented by fi able stoppers
- Includes a centring sleeve with thread of the corresponding glow plug
- Prior to fi ting new glow plugs it is recommended to clean the glow plug shafts
- Universal usage
- External hexagon drive 17.0 mm with milled manual drive head
- Multi-level reamer made out of one piece

Application range: For all vehicles with glow plugs of sizes M9 x 1.0



	Ø mm	Length mm	Weight
152.1122	M9x1,0	17	200,0

3 in 1 glow plug reamer M10 x 1.0

- Special reamer geometry cleans the glow plug shaft, sealing seat and glow rod channel in a single step
- For professional cleaning of glow plug channels in the cylinder head of sizes M10 x 1.0
- Removes deposits between the glow plugs and cylinder head
- Damage due to deep penetration and slipping of the reamer is prevented by fi able stoppers
- Includes a centring sleeve with thread of the corresponding glow plug
- Prior to fi ting new glow plugs it is recommended to clean the glow plug shafts
- Universal usage
- External hexagon drive 17.0 mm with milled manual drive head
- Multi-level reamer made out of one piece

Application range: For all vehicles with glow plugs of sizes M10 x 1.0



	Ø mm	Length mm	Weight
152.1123	M10x1,0	17	200,0

3 in 1 glow plug reamer M10 x 1.25

- Special reamer geometry cleans the glow plug shaft, sealing seat and glow rod channel in a single step
- For professional cleaning of glow plug channels in the cylinder head of sizes M10 x 1.25
- Removes deposits between the glow plugs and cylinder head
- Damage due to deep penetration and slipping of the reamer is prevented by fi able stoppers
- Includes a centring sleeve with thread of the corresponding glow plug
- Prior to fi ting new glow plugs it is recommended to clean the glow plug shafts
- Universal usage
- External hexagon drive 17.0 mm with milled manual drive head
- Multi-level reamer made out of one piece

Application range: For all vehicles with glow plugs of sizes M10 x 1.25



Part No.	Size	Hex Drive (mm)	Length (mm)	Weight (kg)
152.1124	M10x1.25	17	200.0	230

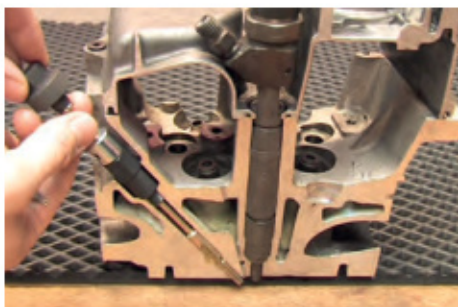
3 in 1 glow plug reamer M12 x 1.25

- Special reamer geometry cleans the glow plug shaft, sealing seat and glow rod channel in a single step
- For professional cleaning of glow plug channels in the cylinder head of sizes M12 x 1.25
- Removes deposits between the glow plugs and cylinder head
- Damage due to deep penetration and slipping of the reamer is prevented by fi able stoppers
- Includes a centring sleeve with thread of the corresponding glow plug
- Prior to fi ting new glow plugs it is recommended to clean the glow plug shafts
- Universal usage
- External hexagon drive 17.0 mm with milled manual drive head
- Multi-level reamer made out of one piece

Application range: For all vehicles with glow plugs of sizes M12 x 1.25

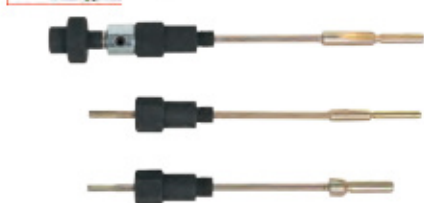


Part No.	Size	Hex Drive (mm)	Length (mm)	Weight (kg)
152.1125	M12x1.25	17	180.0	230



MASTER 3 in 1 glow plug reamer set

- Special reamer geometry cleans the glow plug shaft, sealing seat and glow rod channel in a single step
- For professional cleaning of glow plug channels in the cylinder head of sizes M8 x 1.0, M10 x 1.0, M10 x 1.25 and M12 x 1.25
- Removes deposits between the glow plugs and cylinder head
- Damage due to deep penetration and slipping of the reamer is prevented by fi able stoppers
- Includes a centring sleeve with thread of the corresponding glow plug
- Prior to fi ting new glow plugs it is recommended to clean the glow plug shafts
- Universal usage
- For most vehicle types
- External hexagon drive 10.0 or 17.0 mm with milled manual drive head
- Multi-level reamer made out of one piece



Part No.	Quantity	Set Name	Weight (kg)
152.1120	9 pcs	MASTER 3 in 1 glow plug reamer set	1.12

consists of:

Part No.	Description	Weight (kg)
152.1120-01	17 mm adapter M12 x 1.25	50
152.1120-02	17 mm adapter M10 x 1.25	50
152.1120-03	17 mm adapter M10 x 1.0	50
152.1120-04	17 mm adapter M8 x 1.0	18
152.1120-05	Reamer M12	110
152.1120-06	Reamer M10	106
152.1120-07	Reamer M8	103
152.1120-08	Stopper for reamers	20
152.1120-09	Drive head	55

GLOW PLUG DRILL OUT TOOLS

Universal glow plug drill out kit M8 x 1,0

- Universal repair system with innovative principle for dismantled glow plugs
- Simple and user friendly repair method
- Fast and economical solution of the dismantling problems of glow plugs
- Using a special left-cutting 3-blade stepped drill avoids the need to use drilling sleeves compared to other systems
- Optionally upgradeable with standard impact hammers (M10 x 1.5)
- In durable metal case

Application range: Volkswagen, Audi, Seat, Škoda, Mitsubishi, Mercedes, Fiat, Peugeot, Volvo, Ford, Mazda, Citroën, Opel

Application:

1. Shear off centre electrode
2. Drill out with left-cutting stepped drill
3. Cut left thread M8
4. Clean thread gears M8 x 1
5. Clear the remains of the glow plug with impact weight



Part No.	Quantity	Set Name	Weight (kg)
152.1020	8 pcs	Universal glow plug drill out kit M8 x 1.0	800

consists of:

Part No.	Description	Weight (kg)
152.1021	TIN Thread tap, M8 x 1	20
152.1022	Puller left, M6 x 1 x 120 mm	30
152.1023	Thread tap left, M6 x 1, TIN	20
152.1024	Stepped drill left, M5 x 7 x 150 mm	90
152.1026	Extractor for glow plug electrode 3.20 mm	20
152.1032	Extractor for glow plug electrode 4.50 mm	20
152.1027	Extractor for glow plug electrode 6.50 mm	30
152.1037	Removal adapter	62



Universal glow plug drill out kit M9 x 1,0

- Universal repair system with innovative principle for dismantled glow plugs
- Simple and user friendly repair method
- Fast and economical solution of the dismantling problems of glow plugs
- Using a special left-cutting 3-blade stepped drill avoids the need to use drilling sleeves compared to other systems
- Optionally upgradeable with standard impact hammers (M10 x 1.5)
- In durable metal case

Application:

1. Shear off centre electrode
2. Drill out with left-cutting stepped drill
3. Cut left thread M7
4. Clean thread gears M9 x 1.0
5. Clear the remains of the glow plug with impact weight



Part No.	Quantity	Set Name	Weight (kg)
152.1620	8 pcs	Universal glow plug drill out kit M9 x 1.0	900

consists of:

Part No.	Description	Weight (kg)
152.1022	Puller left, M6 x 1 x 120 mm	30
152.1023	Thread tap left, M6 x 1, TIN	20
152.1624	Stepped drill left, M7	240
152.1625	Thread drill M9 x 1.0	20
152.1621	Extractor for glow plug electrode 2.60 mm	30
152.1032	Extractor for glow plug electrode 4.50 mm	20
152.1033	Extractor for glow plug electrode 8.25 mm	30
152.1037	Removal adapter	62

Universal glow plug drill out kit M10 x 1.0

- Universal repair system with innovative principle for dismantled glow plugs
- Simple and user friendly repair method
- Fast and economical solution of the dismantling problems of glow plugs
- Using a special left-cutting 3-blade stepped drill avoids the need to use drilling sleeves compared to other systems
- Customer-oriented solution
- Cylinder head does not need to be removed
- Optionally upgradeable with standard impact hammers (M10 x 1.5)
- In durable metal case

Application range: Volkswagen, Audi, Seat, Škoda, Mitsubishi, Mercedes, Fiat, Peugeot, Volvo, Ford, Mazda, Citroën, Opel

Application:

1. Shear off centre electrode
2. Drill out with left-cutting stepped drill
3. Cut left thread M7
4. Clean thread gears M10 x 1
5. Clear the remains of the glow plug with impact weight



			9
152.1030	8 pcs	Universal glow plug drill out kit M10 x 1.0	900

consists of:

			9
152.1034	Thread tap left, M7, TIN	30	
152.1035	Puller left, M7 x 120 mm	40	
152.1038	Thread tap M10 x 1	30	
152.1036	Stepped drill left, 9 x 180 mm	114	
152.1031	Extractor for glow plug electrode 3.50 mm	14	
152.1032	Extractor for glow plug electrode 4.50 mm	20	
152.1033	Extractor for glow plug electrode 8.25 mm	30	
152.1037	Removal adapter	62	

Universal glow plug drill out kit M10 x 1.25

- Universal repair system with innovative principle for dismantled glow plugs
- Simple and user friendly repair method
- Fast and economical solution of the dismantling problems of glow plugs
- Using a special left-cutting 3-blade stepped drill avoids the need to use drilling sleeves compared to other systems
- Optionally upgradeable with standard impact hammers (M10 x 1.5)
- In durable metal case

Application:

1. Shear off centre electrode
2. Drill out with left-cutting stepped drill
3. Cut left thread M7
4. Clean thread gears M10 x 1.25
5. Clear the remains of the glow plug with impact weight



			9
152.1610	8 pcs	Universal glow plug drill out kit M10 x 1.25	900

consists of:

			9
152.1615	Thread tap M10 x 1.25	30	
152.1035	Puller left, M7 x 120 mm	40	
152.1034	Thread tap left, M7, TIN	30	
152.1036	Stepped drill left, 9 x 180 mm	114	
152.1031	Extractor for glow plug electrode 3.50 mm	14	
152.1032	Extractor for glow plug electrode 4.50 mm	20	
152.1033	Extractor for glow plug electrode 8.25 mm	30	
152.1037	Removal adapter	62	

Universal glow plug drill out kit M12 x 1.25

- Universal repair system with innovative principle for dismantled glow plugs
- Simple and user friendly repair method
- Fast and economical solution of the dismantling problems of glow plugs
- Using a special left-cutting 3-blade stepped drill avoids the need to use drilling sleeves compared to other systems
- Optionally upgradeable with standard impact hammers (M10 x 1.5)
- In durable metal case

Application:

1. Shear off centre electrode
2. Drill out with left-cutting stepped drill
3. Cut left thread M7
4. Clean thread gears M12 x 1.25
5. Clear the remains of the glow plug with impact weight



			9
152.1630	8 pcs	Universal glow plug drill out kit M12 x 1.25	900

consists of:

			9
152.1634	Stepped drill left, 10.8 x 180 mm	250	
152.1635	Thread tap M12 x 1.25	47	
152.1636	Glow plug thread tap left, M8	40	
152.1637	Puller left, M8	50	
152.1031	Extractor for glow plug electrode 3.50 mm	14	
152.1032	Extractor for glow plug electrode 4.50 mm	20	
152.1033	Extractor for glow plug electrode 8.25 mm	30	
152.1037	Removal adapter	62	

Impact weight and guide rod

- With arched contact surface on the handle hook for exact positioning
- Includes impact weight
- Special steel



Impact weight no.	mm	L mm	9
152.1040	1.25	M10x1.5	280.0 1.45

GLOW PLUG THREAD CUTTING TOOL

Glow plug thread cutting tool M8 x 1.0

- For cleaning and re-cutting M8 x 1.0 glow plug threads
- Simple handling due to eccentric function
- Special length for deep seated thread
- Quick and low-cost thread repair
- Centring shaft
- With conical mounting shaft for thread repair sleeves
- With external hexagon drive
- With knurled knob



	mm	mm	Length mm	9
150.6501	M8 x 1.0	13.0	115.0	80

Glow plug thread cutting tool M10 x 1.0

- For cleaning and re-cutting M10 x 1.0 glow plug threads
- Simple handling due to eccentric function
- Special length for deep seated thread
- Quick and low-cost thread repair
- Centring shaft
- With conical mounting shaft for thread repair sleeves
- With external hexagon drive
- With knurled knob



	mm	mm	Length mm	9
150.6502	M10 x 1.0	13.0	115.0	100

Glow plug thread cutting tool M12 x 1.25

- For cleaning and re-cutting M12 x 1.25 glow plug threads
- Simple handling due to eccentric function
- Special length for deep seated thread
- Quick and low-cost thread repair
- Centring shaft
- With conical mounting shaft for thread repair sleeves
- With external hexagon drive
- With knurled knob



	mm	mm	Length mm	9
150.6503	M12 x 1.25	13.0	140.0	120
150.6504	M12 x 1.25	13.0	270.0	280

Glow plug thread cutting tool M14 x 1.25

- For cleaning and re-cutting M14 x 1.25 glow plug threads
- Simple handling due to eccentric function
- Special length for deep seated thread
- Quick and low-cost thread repair
- Centring shaft
- With conical mounting shaft for thread repair sleeves
- With external hexagon drive
- With knurled knob

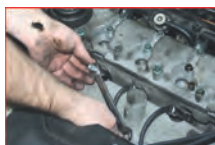


Part No.	Thread	Length mm	Length mm	Weight g
150.6505	M14 x 1.25	13.0	140.0	120

Glow plug and spark plug thread cutting tool set

- For cleaning and re-cutting M12 x 1.25 spark plug or glow plug threads
- Simple handling due to eccentric function
- Special length for deep seated thread
- Quick and low-cost thread repair
- Centring shaft
- With conical mounting shaft for thread repair sleeves
- With external hexagon drive
- With knurled knob
- In durable plastic storage case

Application range: BMW, Mini, Citroën, Peugeot, Renault, Mercedes, Volkswagen, etc.



Part No.	Quantity	Description	Weight g
150.6500	7 pcs	Glow plug and spark plug thread cutting tool set	1.40

consists of:

Part No.	Description	Weight g
150.6501	Thread cutting tool, M8 x 1.0, 115 mm	80
150.6502	Thread cutting tool, M10 x 1.0, 115 mm	100
150.6503	Thread cutting tool, M12 x 1.25, 140 mm	120
150.6504	Thread cutting tool, M12 x 1.25, 270 mm	280
150.6505	Thread cutting tool, M14 x 1.25, 140 mm	120
150.6506	Thread cutting tool, M14 x 1.25, 270 mm	280
150.6507	Thread cutting tool, M18 x 1.5, 90 mm	100

GLOW PLUG THREAD REPAIR

THREADfix repair set M8 x 1.0 for glow plugs

- Unique assortment for the repair of worn or damaged threads
- Ideal for glow plugs
- Simple handling and correct repair
- Provides an entirely firm and a tight seat of the inserts
- Extremely thin walled inserts with rustproofing protection
- Includes thread tap and assembly tool
- Fast repair option without costly warehousing of components
- In durable plastic storage case

M8 x 1.0 x 110 mm



Part No.	Quantity	Description	Weight g
150.5020	9 pcs	THREADfix repair set M8 x 1.0 for glow plugs	300

consists of:

Part No.	Description	Weight g
150.5021	Threaded drill with guide pin M 8 x 1.0	18
150.5022	Threaded drill with guide pin M10 x 1.0	21
150.5023	Reamer with guide pin	19
150.5024	Screw for Bushes L= 90 mm, M8 x 1.0, GL= 106 mm	124
150.5026	Threaded bush with collar L=11 mm, IG= M8x1,0 / AG=M10x1,0 (5 per Pack)	20

THREADfix repair set M9 x 1.0 for glow plugs

- Unique assortment for the repair of worn or damaged threads
- Ideal for glow plugs
- Simple handling and correct repair
- Provides an entirely firm and a tight seat of the inserts
- Extremely thin walled inserts with rustproofing protection
- Includes thread tap and assembly tool
- Fast repair option without costly warehousing of components
- In durable plastic storage case

M9 x 1.0 x 115 mm



Part No.	Quantity	Description	Weight g
150.5030	9 pcs	THREADfix repair set M9 x 1.0 for glow plugs	380

consists of:

Part No.	Description	Weight g
150.5031	Threaded drill with guide pin M9 x 1.0	19
150.5032	Threaded drill with guide pin M11 x 1.0	24
150.5033	Reamer with guide pin	24
150.5034	Screw for Bushes L=93 mm, M9 x 1.0, GL= 109 mm	180
150.5036	Threaded bush with collar L=11 mm, IG= M9x1,0 / AG=M11x1,0 (5 per Pack)	20

THREADfix repair set M10 x 1.0 for glow plugs

- Unique assortment for the repair of worn or damaged threads
- Ideal for glow plugs
- Simple handling and correct repair
- Provides an entirely firm and a tight seat of the inserts
- Extremely thin walled inserts with rustproofing protection
- Includes thread tap and assembly tool
- Fast repair option without costly warehousing of components
- In durable plastic storage case

M10 x 1.0 x 120 mm
M10 x 1.0 x 128 mm



Part No.	Quantity	Description	Weight g
150.5040	15 pcs	THREADfix repair set M10 x 1.0 for glow plugs	810

consists of:

Part No.	Description	Weight g
150.5041	Threaded drill with guide pin M10 x 1.0	26
150.5042	Threaded drill with guide pin M12 x 1.0	30
150.5043	Reamer with guide pin	29
150.5044	Screw for Bushes (S) L= 85 mm, M10 x 1.0, GL= 103 mm	175
150.5047	Screw for Bushes L= 91 mm, M10 x 1.0, GL= 109 mm	180
150.5048	Threaded bush with collar L=12 mm, IG= M10x1,0 / AG=M12x1,0 (5 per Pack)	20
150.5049	Threaded bush with collar L=19 mm, IG= M10x1,0 / AG=M12x1,0 (5 per Pack)	20

THREADfix repair set M10 x 1.25 for glow plugs

- Unique assortment for the repair of worn or damaged threads
- Ideal for glow plugs
- Simple handling and correct repair
- Provides an entirely firm and a tight seat of the inserts
- Extremely thin walled inserts with rustproofing protection
- Includes thread tap and assembly tool
- Fast repair option without costly warehousing of components
- In durable plastic storage case

M10 x 1.25 x 125 mm



Part No.	Quantity	Description	Weight g
150.5050	9 pcs	THREADfix repair set M10 x 1.25 for glow plugs	630

consists of:

Part No.	Description	Weight g
150.5051	Threaded drill with guide pin M10 x 1.25	24
150.5052	Threaded drill with guide pin M12 x 1.25	25
150.5053	Reamer with guide pin	25
150.5054	Screw for Bushes L= 84 mm, M10 x 1.25, GL= 107 mm	183
150.5056	Threaded bush with collar L=12 mm, IG= M10x1,25 / AG=M12x1,0 (5 per Pack)	20

THREADfix repair set M12 x 1.25 for glow and spark plugs

- Unique assortment for the repair of worn or damaged threads
- Ideal for spark plugs and glow plugs
- Simple handling and correct repair
- Provides an entirely firm and a slight seat of the inserts
- Extremely thin walled inserts with rustproofing protection
- Includes thread tap and assembly tool
- Fast repair option without costly warehousing of components
- In durable plastic storage case

M12 x 1.25 x 120 mm
M12 x 1.25 x 130 mm
M12 x 1.25 x 150 mm



150.5060	21 pcs	THREADfix repair set M12 x 1.25 for glow and spark plugs	920
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consists of:

150.5061	Threaded drill with guide pin M12 x 1.25	47
150.5062	Threaded drill with guide pin M14 x 1.25	53
150.5063	Reamer for guide pin	52
150.5064	Screw for Bushes (S) L= 89 mm, M12 x 1.5, GL= 108 mm	230
150.5068	Screw for Bushes (M) L= 95 mm, M12 x 1.25, GL= 114 mm	238
150.5069	Screw for Bushes (L) L= 103 mm, M12 x 1.25, GL= 122 mm	246
150.5077	Threaded bush with collar L=12 mm, IG=M12x1.25 / AG=M14x1.25 (5 per Pack)	20
150.5078	Threaded bush with collar L=19 mm, IG=M12x1.25 / AG=M14x1.25 (5 per Pack)	20
150.5079	Threaded bush with collar L=26 mm, IG=M12x1.25 / AG=M14x1.25 (5 per Pack)	20

Stainless steel repair set M8 x 1.00 for glow plugs

- Unique assortment for the repair of worn or damaged threads
- Ideal for glow plugs
- Simple handling and correct repair
- Provides an entirely firm and a slight seat of the inserts
- Extremely thin walled inserts made from stainless steel
- Includes thread tap and assembly tool
- Fast repair option without costly warehousing of components
- In durable steel storage case



150.6030	24 pcs	Stainless steel repair set M8 x 1,00 for glow plugs	268
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consists of:

150.6031	Thread insert set M8 x 1,0, VPE 10 pcs., L=11 mm	120
150.6032	Twist drill for M8, Ø 8.3 mm	34
150.6033	Threaded tap M8 x 1,0	36
150.6034	Mounting tool for M8	48
150.6025	Cone mill M6 - M8	16

Stainless steel repair set M10 x 1.0 for glow plugs

- Unique assortment for the repair of worn or damaged threads
- Ideal for glow plugs
- Simple handling and correct repair
- Provides an entirely firm and a slight seat of the inserts
- Extremely thin walled inserts made from stainless steel
- Includes thread tap and assembly tool
- Fast repair option without costly warehousing of components
- In durable steel storage case



150.6060	19 pcs	Stainless steel repair set M10 x 1.0 for glow plugs	318
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consists of:

150.6061	Thread insert set, 150.6060, 5pcs, M10x1.0	47
150.6062	Twist drill, M10, Ø 10.3mm	58
150.6063	Threaded tap f.150.6060, M10x1.0	33
150.6064	Mounting tool f.150.6060, M10	62
150.6065	Insertion pin breaker f.150.6060, M10	26

Stainless steel repair set M10 x 1.25 for glow plugs

- Unique assortment for the repair of worn or damaged threads
- Ideal for glow plugs
- Simple handling and correct repair
- Provides an entirely firm and a slight seat of the inserts
- Extremely thin walled inserts made from stainless steel
- Includes thread tap and assembly tool
- Fast repair option without costly warehousing of components
- In durable steel storage case



150.6070	19 pcs	Stainless steel repair set M10 x 1.25 for glow plugs	328
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consists of:

150.6071	Thread insert set M10 x 1.25, VPE 5 pcs., L=13,8 mm	62
150.6062	Twist drill for M10, Ø 10,3 mm	58
150.6073	Threaded tap M10 x 1.25	33
150.6064	Mounting tool for M10	62
150.6065	Cone mill M10	26

Stainless steel repair set M12 x 1.25 for glow plugs

- Unique assortment for the repair of worn or damaged threads
- Ideal for glow plugs and spark plugs
- Simple handling and correct repair
- Provides an entirely firm and a slight seat of the inserts
- Extremely thin walled inserts made from stainless steel
- Includes thread tap and assembly tool
- Fast repair option without costly warehousing of components
- In durable steel storage case



150.6110	14 pcs	Stainless steel repair set M12 x 1.25 for glow plugs	453
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consists of:

150.6111	Thread insert set f.150.6110, 5pcs	85
150.6102	Twist drill, M12, Ø 12.3mm	84
150.6113	Threaded tap f.150.6110, M12x1.25	67
150.6104	Mounting tool f.150.6100, M12	104
150.6105	Insertion pin breaker f.150.6100, M12	46

Stainless steel repair set M5 - M12 for glow plugs

- Unique assortment for the repair of worn or damaged threads
- Ideal for glow plugs and spark plugs
- Simple handling and correct repair
- Provides an entirely firm and a slight seat of the inserts
- Extremely thin walled inserts made from stainless steel
- Includes thread tap and assembly tool
- Fast repair option without costly warehousing of components
- In durable steel storage case



150.6150	130 pcs	Stainless steel repair set M5 - M12 for glow plugs	2.05
----------	---------	--	------

consists of:

150.6001	Thread insert set f.150.6000, 10pcs	14
150.6002	Twist drill, M5, Ø 5.2mm	9
150.6003	Threaded tap f.150.6000, M5x0.8	12
150.6004	Mounting tool f.150.6000, M5	20

consists of:

Item No.	Description	Quantity
150.6005	Insertion pin breaker f.150.6000, M5	9
150.6011	Thread insert set f.150.6010, 10pcs	17
150.6012	Twist drill, M6, Ø 6.3mm	17
150.6013	Threaded tap f.150.6010, M6x1.0	21
150.6014	Mounting tool f.150.6010, M6	24
150.6015	Insertion pin breaker f.150.6010, M6	10
150.6025	Insertion pin breaker f.150.6020, M7	16
150.6032	Twist drill, M8, Ø 8.3mm	34
150.6034	Mounting tool f.150.6030, M8	48
150.6041	Thread insert set f.150.6040, 10pcs	26
150.6043	Threaded tap f.150.6040, M8x1.25	36
150.6064	Mounting tool f.150.6060, M10	62
150.6065	Insertion pin breaker f.150.6060, M10	26
150.6081	Thread insert set f.150.6080, 5pcs	24
150.6082	Twist drill, M10, Ø 10.4mm	61
150.6083	Threaded tap f.150.6080, M10x1.5	41
150.6104	Mounting tool f.150.6100, M12	104
150.6105	Insertion pin breaker f.150.6100, M12	46
150.6122	Twist drill, M12, Ø 12.4mm	88
150.6123	Threaded tap f.150.6120, M12x1.5	67
150.6131	Thread insert set f.150.6130, 5pcs	33

Stainless steel thread repair set M6 - M10

- Assortment of for repairing thread damaged or worn threads indispensably use for Materials with sight stability e.g. aluminum alloy or magnesium alloy
- Ideally for the mechanical engineering, vehicle technology, electro and medical technology
- Resistant to corrosion effects and temperature resistant thread uses
- Includes threaded tap and assembly tool
- Fast repair possibility without costly replacement of bearing housings and components
- Special stainless steel
- In durable steel storage case



Item No.	Description	Quantity
150.6155	87 pcs Stainless steel thread repair set M6 - M10	1.53

consists of:

Item No.	Description	Quantity
150.6011	Thread insert set f.150.6010, 10pcs	17
150.6012	Twist drill, M6, Ø 6.3mm	17
150.6013	Threaded tap f.150.6010, M6x1.0	21
150.6014	Mounting tool f.150.6010, M6	24
150.6015	Insertion pin breaker f.150.6010, M6	10
150.6025	Insertion pin breaker f.150.6020, M7	16
150.6032	Twist drill, M8, Ø 8.3mm	34
150.6034	Mounting tool f.150.6030, M8	48
150.6041	Thread insert set f.150.6040, 10pcs	26
150.6043	Threaded tap f.150.6040, M8x1.25	36
150.6064	Mounting tool f.150.6060, M10	62
150.6065	Insertion pin breaker f.150.6060, M10	26
150.6081	Thread insert set f.150.6080, 5pcs	24
150.6082	Twist drill, M10, Ø 10.4mm	61
150.6083	Threaded tap f.150.6080, M10x1.5	41

Stainless steel thread repair set M6 - M14

- Assortment of for repairing thread damaged or worn threads indispensably use for Materials with sight stability e.g. aluminum alloy or magnesium alloy
- Ideally for the mechanical engineering, vehicle technology, electro and medical technology
- Resistant to corrosion effects and temperature resistant thread uses
- Includes threaded tap and assembly tool
- Fast repair possibility without costly replacement of bearing housings and components
- Special stainless steel
- In durable steel storage case



Item No.	Description	Quantity
150.6160	113 pcs Stainless steel thread repair set M6 - M14	2.52

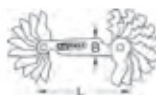
consists of:

Item No.	Description	Quantity
150.6011	Thread insert set f.150.6010, 10pcs	17
150.6012	Twist drill, M6, Ø 6.3mm	17
150.6013	Threaded tap f.150.6010, M6x1.0	21
150.6014	Mounting tool f.150.6010, M6	24
150.6015	Insertion pin breaker f.150.6010, M6	10
150.6025	Insertion pin breaker f.150.6020, M7	16
150.6032	Twist drill, M8, Ø 8.3mm	34
150.6034	Mounting tool f.150.6030, M8	48
150.6041	Thread insert set f.150.6040, 10pcs	26
150.6043	Threaded tap f.150.6040, M8x1.25	36
150.6064	Mounting tool f.150.6060, M10	62
150.6065	Insertion pin breaker f.150.6060, M10	26
150.6081	Thread insert set f.150.6080, 5pcs	24
150.6082	Twist drill, M10, Ø 10.4mm	61
150.6083	Threaded tap f.150.6080, M10x1.5	41
150.6104	Mounting tool f.150.6100, M12	104
150.6105	Insertion pin breaker f.150.6100, M12	46
150.6122	Twist drill, M12, Ø 12.4mm	88
150.6131	Thread insert set f.150.6130, 5pcs	33
150.6133	Threaded tap f.150.6130, M12x1.75	68
150.6141	Thread insert set f.150.6140, 5pcs	16
150.6142	Thread insert set f.150.6140, 5pcs	12
150.6143	Thread insert set f.150.6140, 5pcs	7
150.6144	Threaded tap f.150.6140, M14x1.25	72
150.6145	Mounting tool f.150.6140, M14x1.25	80

THREAD GAUGES

Thread gauge

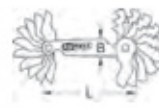
- For controlling and increasing the interior thread and outside thread
- Imperial sizes
- Cylindrical tapered
- Leaves fan shaped arrangement
- Leaves individually marked with size
- Out of hardened spring steel



Item No.	Measuring range	B mm	L mm	Weight
301.0090	4-5-5-6-7-8-9-10-11-12-13-14-16-18-20-22-24-32-40-48-56-64mm	12.2	66.5	40

Thread gauge

- For controlling and increasing the interior thread and outside thread
- Metric sizes
- Cylindrical tapered
- Leaves fan shaped arrangement
- Leaves individually marked with size
- Out of hardened spring steel



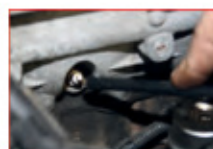
Item No.	Measuring range	B mm	L mm	Weight
301.0095	0,40-0,45-0,50-0,60-0,70-0,75-0,80-1,00-1,25-1,50-1,75-2,00-2,50-3,00-3,50-4,00-4,50-5,00-5,50-6,00mm	12.2	66.5	40

TEST DEVICE

Glow plug tester

- Quick identification of defective glow plugs independent of the voltage
- Testing is carried out when installed, no need to remove the glow plugs
- For 12.0 V glow plugs in diesel engines
- With integrated LED display for the state of the glow plugs
- Automatic switch off
- Voltage supply from 12.0 V starter battery on the vehicle
- 1280.0 mm cable length with crocodile clips
- 300.0 mm cable length with test probe
- In a practical storage case

Application range: All vehicles with diesel engines with 12.0 V glow plugs



Item No.	Length mm	Width mm	Height mm	Weight
550.1401	135.0	80.0	35.0	340





THE ACCUMULATED PULLER EXPERTISE

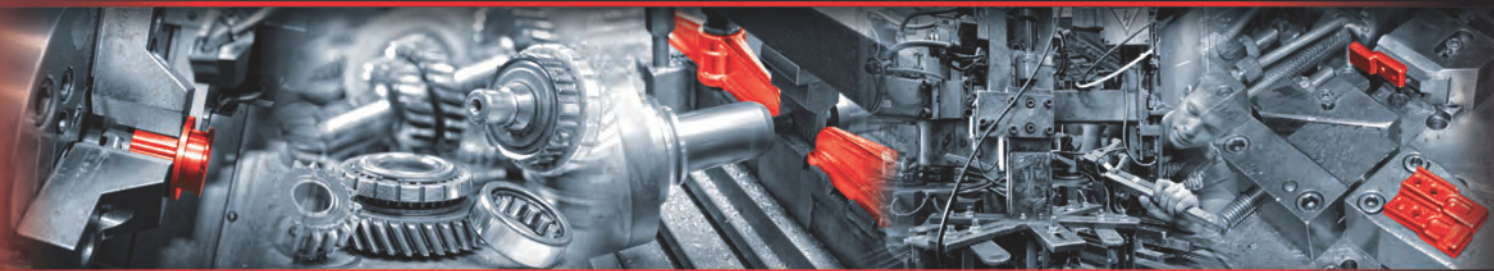
MADE IN
GERMANY

FROM
SMALL
TO
LARGE

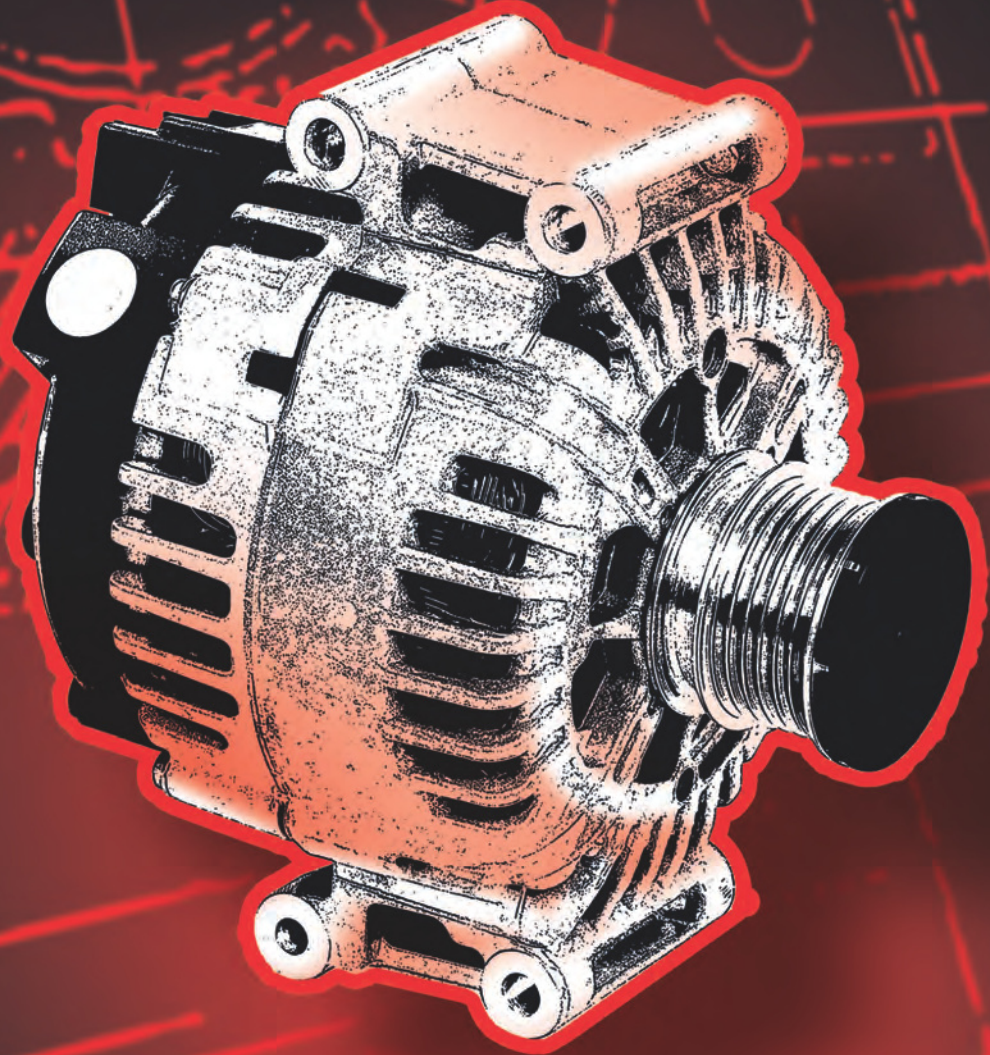


K15

**OVER 1,000 PULLER VARIANTS UP TO 50 T
FOR PARTS WITH A DIAMETER OF 5-1000 MM**



ENGINE - AUXILIARY DRIVE BELT / ALTERNATOR



Innovation is
our mission!



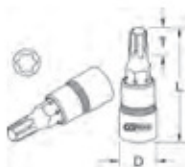
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TENSION PULLEY WRENCH V/V RIBBED BELTS

Bit socket for TX screws

- Suitable for installing and removing the V belt
- For operating the tension pulley securing screws
- TX
- Internal square drive to DIN 3120/ISO 1174 with ball reception
- With press fitted nickel plated insert bit
- For manual operation
- Matt finish
- Chrome vanadium

Application range: Japanese vehicles, etc.



		D mm	L mm	T mm	
911.1361	T20	22.0	55.0	17.0	70
911.1362	T25	22.0	55.0	17.0	700
911.1363	T27	22.0	55.0	17.0	710
911.1364	T30	22.0	55.0	17.0	710
911.1365	T40	22.0	55.0	17.0	730
911.1366	T45	22.0	55.0	17.0	90
911.1367	T50	22.0	55.0	17.0	90
911.1368	T55	22.0	55.0	17.0	770
911.1369	T60	22.0	55.0	17.0	90

V-belt and tooth belt wrenches

- 12-point
- For loosening the automatic clamping device
- Problem free changing of the belt
- Saves the cooling unit service on VAG
- For hard to reach places
- With plastic-coated handle
- Chrome vanadium

Application range: Audi A4, Volkswagen Passat > 97 with TDI or pump injector engines Opel, DOHC 4- / 6 cylinder (e.g. Astra F with cooling), Saab V6 engines, Mitsubishi



		L mm	
150.1206	10	460.0	320
150.1207	11	460.0	320
150.1208	12	460.0	320
150.1201	13	460.0	320
150.1209	14	460.0	320
150.1202	15	460.0	320
150.1203	16	460.0	320
150.1204	17	460.0	320
150.1213	18	460.0	320
150.1205	19	460.0	320

Universal wedge and timing belt wrench set

- 12 point
- For relaxing the automatic clamping device
- Problem free changing of the belt
- For VAG in the service position for the cooling system
- For hard to reach places
- With plastic coated handle
- Chrome vanadium

Application range: Audi A4, Volkswagen Passat after 97 with TDI or Pump-Nozzle Engine Opel DOHC 4- / 6-Cylinder (e.g. Astra F with air conditioning), Saab V6-Engines, Mitsubishi



150.1200 5 pcs Universal wedge and timing belt wrench set	2.18

consists of:

150.1201 Wedge and timing belt wrench, dim. 13, length 460 mm	320
150.1202 Wedge and timing belt wrench, dim. 15, length 460 mm	320
150.1203 Wedge and timing belt wrench, dim. 16, length 460 mm	320
150.1204 Wedge and timing belt wrench, dim. 17, length 460 mm	320
150.1205 Wedge and timing belt wrench, dim. 19, length 460 mm	320



Universal V-belt and tooth belt wrenches

- TX-E-Profil
- For loosening the automatic clamping device
- Problem free changing of the belt
- For hard to reach places
- With plastic-coated handle
- Chrome vanadium



	L mm		
150.1214	E8	460.0	320
150.1216	E10	460.0	320
150.1217	E12	460.0	320
150.1218	E14	460.0	320
150.1219	E16	460.0	320
150.1221	E18	460.0	320
150.1222	E20	460.0	320
150.1223	E22	460.0	320

VAG V belt and timing belt wrench

- For loosening the automatic clamping device
- Problem free changing of the belt
- For hard to reach places
- With plastic-coated handle
- Chrome vanadium

Application range: Audi, Seat, Škoda and Volkswagen with 2.0 TDI and 1.4 TSI engines

Volkswagen Beetle (2011-2013), Eos (2007-2013), Golf (2003-2008), Golf (>2008), Golf Estate (2007-2009), Golf Estate (>2009), Gold Plus (2005-2009), Golf Plus (>2009), Golf VI Cabrio (>2011), Jetta (2005-2011), Jetta (>2011), Scirocco (>2008); Passat (2005-2011), Passat (>2011), Tiguan (2010-2013), Polo (>2009), Touran (2007-2013), Audi A1 (2010-2013), Škoda Octavia (>2004), Yeti (2010-2013), engine code: CAVD, CAXA, CAVB, CAVC



		mm	Length mm	
400.4300	16	380.0	501	

Renault V belt wrench TX T45

- Suitable for installing and removing the V belt
- Required to tension the automatic tension pulley and to relax the V wedge
- For hard-to-reach places
- With plastic-coated handle
- Chrome vanadium

Application range: Renault 2.2 L Diesel engines (G8T), e.g. Safrane, Laguna, Espace, etc.



150.1226 2 pcs Renault V belt wrench TX T45	460

consists of:

150.1227 Special wrench with 8.0 mm hexagonal drive, 450 mm	440
150.1228 Bit with 8.0 mm hexagonal drive for TX screws T45	20

VAG V belt wrench TX T60

- Suitable for installing and removing the V belt
- Required to tension the automatic tension pulley and to relax the V wedge
- For hard-to-reach places
- With plastic-coated handle
- Chrome vanadium

Application range: Audi and Volkswagen 2.7 and 3.0 V6 TDI diesel engines, e.g. Audi A5, A6, A8, Q5, Q7, Volkswagen Phaeton and Touareg



150.1229 2 pcs VAG V belt wrench TX T60	470

consists of:

150.1227	Special wrench with 8.0 mm hexagonal drive, 450 mm	440	
150.1233	Bit with 8.0 mm hexagonal drive for TX screws T60	20	

BMW and Mercedes V belt wrench TX T60

- Suitable for installing and removing the V belt
- Required to tension the automatic tension pulley and to relax the V wedge
- For hard-to-reach places
- With plastic-coated handle
- Chrome vanadium

Application range: BMW 5 series (E60) 2.0 L petrol engine M54 and Mercedes C class (W203, W204) 1.8 L petrol engine M271, etc.



150.1234	2 pcs	BMW and Mercedes V belt wrench TX T60	460	
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consists of:

150.1227	Special wrench with 8.0 mm hexagonal drive, 450 mm	440	
150.1236	Bit with 8.0 mm hexagonal drive for TX screws T60	20	

Mercedes V wedge assembly lever

- Suitable for installing and removing the V belt
- Required to operate the automatic pulley
- For hard-to-reach places
- Bronzed bolts
- Chrome vanadium

Application range: Mercedes Type 168, 169 (A class) and Type 245 (B class)



150.1238	Ø mm	Length mm	
	15,0	610,0	620

Mercedes V belt tension wrench

- Suitable for installing and removing the V belt
- Required to pull back the automatic tension pulley and to relax the V wedge
- For hard-to-reach places
- Special steel

Application range: Mercedes Transporter 208 D and 410 D range (engine code: OM601 and OM602), also for Mercedes passenger cars with hydraulic pump for the new regulations



150.1239	Mercedes V belt tension wrench	60	
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VAG V belt tension lever

- Suitable for installing and removing the V belt
- Required to release the automatic pulley
- Universal usage thanks to the attachable head piece
- For hard-to-reach places
- Chrome vanadium

Application range: Audi, Seat, Škoda, Volkswagen Polo, Golf, Passat, T4, etc.



150.1237	L mm	
	450,0	700

ELASTIC BELT TOOL

Elastic strap tool set

- Suitable for the assembly and disassembly of the elastic V ribbed discs
- Also suitable use with double ribbed discs
- Quick, problem-free and correct changing of the belt
- No damage to the pulley wheel and the belt
- Minimal force required
- Large working range thanks to various assembly and disassembly tools
- In durable plastic storage case

Application range: Audi, BMW, Chrysler, Citroën, Fiat, Ford, Iveco, Peugeot, Lancia, Mazda, Mercedes, Seat, Škoda, Volvo, Volkswagen, etc.



150.3180	11 pcs	Elastic strap tool set	2,24	
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consists of:

150.3181	Engine turning adaptor	441	
150.3182	Adaptor f. water pump, Ford/Volvo	370	
150.3183	Adaptor f. Crankshaft Pulley	75	
150.3184	Belt attachmenttool type 1	225	
150.3185	Belt attachmenttool type 2	100	
150.3186	Spacer screw, 65mm	250	
150.3187	Spacer screw, 40mm	15	
150.3188	Spacer screw, 25mm	12	
150.3189	Belt attachmenttool type3	23	
150.3198	Belt stretcher	230	
150.3199	Cover	210	

COUNTER HOLD TOOL

Universal counter holder for V ribbed belt discs

- With strong belt that has an adjustable flexible diameter
- For securing belt discs
- Ideal for water pumps, alternators, drive pulleys for pumps, fans, etc.
- Can be used for discs with a diameter 50.00-200.00 mm



150.3152	L mm	Replacement bit	
	360,0	150.3153	506

Universal counter holder for V ribbed discs

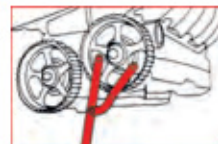
- With strong belt that has an adjustable flexible diameter
- 5.0 mm groove spacing
- For securing toothed-belt discs
- Ideal for water pumps, alternators, drive pulleys for pumps, fans, etc.
- Can be used for discs with a diameter 50.00-200.00 mm



150.3150	L mm	Replacement bit	
	360,0	150.3151	542

Pulley wheel counter hold wrench

- Suitable for counter holding the timing belt wheel on the cam shaft
- Hole distance can be varied
- Adjustable, universal usage
- With plastic-coated handle
- Chrome vanadium



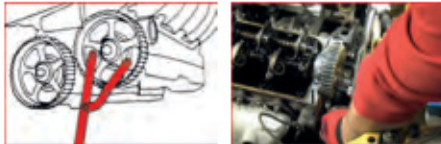
400.9007	Length mm	
	410,0	525

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Universal timing gear holder set

- Ideally suited for almost all vehicle types
- Universal usable tool for locking, turning and fastening for stepped timing belts
- The overall length of 520 mm guarantees an optimal lever for loosening the timing belts reinforcement screws
- Stepless adjustment of Ø 40 - 220 mm - pin height: 35 mm
- Includes 4 pairs of screw on plugs
- With plastic coated handle
- Special steel

Application range: Timing belt wheels on camshafts and Injection pumps bleeding of wheels and couplings etc.



			Weight
150.3000	11 pcs	Universal timing gear holder set	2.20

consists of:

			Weight
150.3001	Loosening lever	520 mm, adjustable	1120
150.3002	Peg, Ø 6 - 10 mm		100
150.3003	Peg, Ø 8 - 11 mm		50
150.3004	Peg, Ø 10 - 12 mm		40
150.3005	Peg, Ø 11 - 16 mm		40
150.3006	Fixing nut for pegs, knurled		20

Universal locking tool / counter tool for crank shaft wheels

- Ideally suited to almost all vehicle types
- For working areas with gear diameters 45 - 190 mm
- With quick adjustment for setting the working area
- Universally used tool for locking, turning and securing locked pulley wheels
- Allows the crank shaft drive wheels to turn or for releasing the securing screws on the pulley wheel
- Ideal leverage thanks to 390 mm total length
- Very narrow tool for maximum access
- Quick and easy usage
- Maximum holding force
- With plastic-coated handle
- Special steel



	Ø mm	L mm	Weight
150.2990	45-190	390.0	500



Mercedes belt disc counter hold tool

- Damage-free and secure counter holding of the belt disc
- Long lever
- With suspension hole
- Chrome vanadium

Application range: Mercedes engines 602, 603, 604, 605, 606



	Length mm	Weight
150.1252	350.0	440

Mercedes belt disc counter hold tool set

- For counter holding the crank shaft belt drive when releasing or tightening the crank shaft central screw
- Required when changing the belt disc or repairing the engine
- Special steel

Application range: Mercedes engines, e.g. M112, M113 and OM 642, etc.



			Weight
150.3310	7 pcs	Mercedes belt disc counter hold tool set	2.24

consists of:

			Weight
150.3311	1	Perforated disc	1219
150.3312	3	Bolts, Ø 15 mm	126
150.3313	3	Bolts, Ø 20 mm	215

VAG counter hold wrench for water pump belt discs

- Ideal for locking and releasing during assembly and disassembly of water pump belt pulleys
- For easy releasing of secured screws
- Chrome vanadium

Application range: Audi, Volkswagen, etc.



	L mm	Weight
150.3026	250.0	490

Holding wrench for water pump belt pulleys for low-down water pumps

- Ideal for locking and releasing during assembly and disassembly of water pump belt pulleys
- Easy to remove fixed screws
- For low-down water pumps on engines with air condition
- Chrome vanadium

Application range: Audi, Volkswagen (engines with air condition), etc.



	L mm	Weight
150.3028	300.0	560

VAG belt disc counter hold wrench

- Simple assembly and disassembly of the crank shaft belt disc and the crank shaft toothed-belt wheel
- Versatile usage
- Long lever
- With plastic-coated handle
- Chrome vanadium

Application range: Audi A2, A4, A6, Seat, Škoda, Volkswagen Lupo, Polo, Golf 4, Bora, Passat, Beetle, Sharan, etc.

engine code: AGP, AGR, AMF, AJM, ATJ, AEE, AEX, APE, AEH, AKL, APF, AWH, ALN, ANA, ARM, AUA, ADX, AEA, AFH, AFK, AHW, etc.



	Length mm	Weight
150.1244	687.0	2.06

Universal belt pulley rotary lever

- Universal adjustable lever
- For the spinning of the engine by means of the belt pulley
- With plastic coated handle
- Chrome vanadium

Application range: Audi/Volkswagen, BMW, Ford, Opel, Peugeot, Renault, Rover, Japanese Models etc.



	L mm	Weight
150.3029	325.0	650

VISCO FAN TOOL

Universal Visco ventilator wrench

- For removing the hubs and bleeding with viscous couplings
- Especially slim design
- Enables easy access
- PVC dipped handle
- Special steel

Application range: BMW, Ford, Opel, GM etc.



mm	Suitable for	kg
150.3022	32 for clamping the viscous coupling drive shaft on BMW, Ford	300
150.3027	36 For counter holding the Visco coupling drive shaft BMW, Ford, GM	340
150.3023	41 for twisting the water pump on Opel and GM	422
150.3024	46 for twisting the water pump on Opel and GM	405

Ford fan hub wrench

- For the professional engine repair
- Simple assembly and disassembly of the Visco coupling rotor
- Makes it possible to secure the pulley wheel of the water pump and at the same time release the heating filler
- Special steel
- Very high degree of accuracy

Application range: Ford Transit (2001 - 2006)

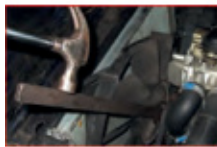


Part no.	mm	kg
400.9014	69,0	133

Visco ventilator wrench

- Ideally suited to removing the hubs on ventilators with viscous coupling
- Especially slim design
- Allows for easy access
- With suspension hole
- Special steel

Application range: Mercedes engines M103 (6 cylinder), M104 (6 cylinder 4 valve), M119 (8 cylinder 4 valve), M120 (12 cylinder 4 valve)

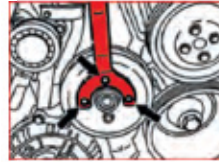


mm	Length mm	kg	
150.3301	65	400,0	472

Visco ventilator wrench

- Ideally suited to removing the hubs on ventilators with viscous coupling
- Especially slim design
- Allows for easy access
- Specially curved
- With suspension hole
- Special steel

Application range: Mercedes (engine: M 111.979, 112, 113, 119.985)



		L mm	kg
150.3008	Visco ventilator wrench	410,0	370

Holding wrench for Visco ventilator

- For counter holding the ventilation valve when disassembling the Visco ventilator
- Especially slim design
- Allows for easy access
- Special steel

Application range: BMW engine M10, M20, M21, M30, M50, M51, M52, M52TU, M54, M56, M70, M73, S14 and S38

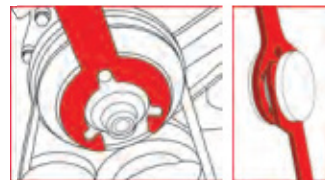


	Length mm	kg
150.3306	380,0	330

Land Rover fan hub wrench set

- For counter holding the Visco coupling drive shaft
- Makes it possible to secure the pulley wheel of the water pump and at the same time release the heating filler
- Also suitable for the removal of the viscous connecting socket on the cooler ventilator
- Special steel

Application range: Land Rover Discovery II, Range Rover, Defender 1990-2006 with Td5 or V8 engines



		kg
400.4175	2 pcs Landrover	18,29

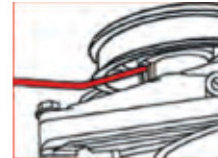
consists of:

		kg
400.0176	Holding wrench for Visco fan for Land Rover	1,05
400.0177	Visco fan wrench 36.0 mm for Land Rover	14,78

Ventilator coupling counter hold for Mercedes

- Ideally suited to securing the ventilator coupling
- Especially slim design
- Allows for easy access
- Especially curved for use
- Special steel

Application range: Mercedes (engine: M 103, 104)



		L mm	kg
150.3009	Ventilator coupling counter hold for Mercedes	300,0	105

Mercedes belt disc wrench 8.0 mm

- Suitable for the installation and removal of the fan coupling and the belt disc
- Required when changing the water pump
- For hard-to-reach places
- With plastic-coated handle
- Chrome vanadium

Application range: Mercedes engines M102, M103, OM601, OM602, OM603, OM605, OM606



			kg
150.1303	2 pcs	Mercedes belt disc wrench 8.0 mm	460

consists of:

		kg
150.1227	Special wrench with 8.0 mm hexagonal drive, 450 mm	440
150.1307	Bit with 8.0 mm hexagonal drive for internal hexagonal screws 8.0 mm	20



Mercedes compressor belt disc wrench 10.0 mm

- Suitable for releasing the screws on the compressor belt disc
- Required when changing the water pump
- For hard-to-reach places
- With plastic-coated handle
- Chrome vanadium

Application range: Mercedes engines M102, M103, OM601, OM602, OM603, OM605, OM606



150.1304	2 pcs	Mercedes compressor belt disc wrench 10.0 mm	460
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consists of:

150.1227	Special wrench with 8.0 mm hexagonal drive, 450 mm	440
150.1308	Bit with 8.0 mm hexagonal drive for internal hexagonal screws 10.0 mm	20

Ventilator hub wrench set

- For counter holding the Visco coupling drive shaft
- Makes it possible to secure the water pump's belt pulley and release the heating ventilator at the same time
- Also suitable for the removal of the viscous connecting socket on the cooler ventilator
- Special steel
- In durable plastic storage case

Application range: BMW, Mercedes and Ford



150.3320	12 pcs	Ventilator hub wrench set	1.89
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consists of:

150.3008	Visco ventilator wrench	370
150.3009	Ventilator coupling counter hold for Mercedes Benz	105
150.3022	Viscous fan spanner, BMW, Ford, 32mm	300
150.3024	Viscous fan spanner, Opel, GM, 46mm	405
150.3027	Viscous fan spanner, BMW, Ford, GM, 36mm	340
150.3301	Visco ventilator wrench	472
150.3306	Holding wrench for Visco ventilator	330
150.3321	Adapter, short, Ø 20 mm	5
150.3322	Adapter, Ø 8 mm	22
150.3323	Adapter, Ø 10 mm	29
150.3324	1/2" Holding wrench	635
151.26025	BASIC key wrench, hex, short, 2.5mm	10

SLOGGING SPANNER

Hand impact wrench

- Ideal for loosening extremely jammed screws
- Also usable to the tightening of screws and/or nuts
- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- Optimal 8:1 torque ratio
- 360° rotating head
- Impact screw can be combined with every 1/2" drive nut
- With one component handle



150.2096	1/2"	L mm	1.32
		475.0	

Impact spanner

- For the installation and extension of compensational corrugated discs without extension of the struts
- For loosening of stuck stop screws
- Especially suitable for narrow hard to access areas
- Square drive adaptor to DIN 3120 / ISO 1174 with ball lock
- Can be combined with every any 1/2" drive nut
- Optimal loosening moment through blow effect
- Hand protection grip
- Special steel



150.2090	1/2"	L mm	1.32
		560.0	

ALTERNATOR WRENCH

CHROMEplus® Starter and block spanner

- FlankTraction profil (12 point)
- Especially suitable for narrow hard to access areas
- Chrome plated and mirror polished
- Chrome vanadium



	mm	A1 mm	A2 mm	B1 mm	B2 mm	L mm	1.89
518.0852	10x12	6.5	6.6	15.6	17.9	142.0	57
518.0853	11x13	8.0	8.2	17.9	20.7	164.0	90
518.0856	14x17	8.2	9.2	21.4	25.1	190.0	133
518.0857	16x18	8.8	9.6	24.8	27.7	216.0	166
518.0859	19x22	10.0	11.1	27.6	33.0	255.0	244

CHROMEplus® half moon - and manifold spanner set

- FlankTraction profil
- Especially suitable for narrow hard to access areas
- Chrome plated and mirror polished
- Chrome vanadium



518.0850	5 pcs	10x12 - 11x13 - 14x17 - 16x18 - 19x22 mm	890
----------	-------	--	-----

Alternator tension wrench

- Suitable for engines in which the V ribbed belt is only tensioned via the spring-loaded alternator
- With strengthened and ribbed pins to relax the V ribbed belt
- Ribs prevent the pins from displacing from the bore holes of the alternator
- Special steel

Application range: Volkswagen engines



150.3037	Pin key mm	440
	157.0	

FREE-RUNNING BELT DISC TOOL

V-Ribbed Alternator combination key - internal hexagon

- For the assembly and disassembly of free-running belt discs when changing alternator or the belt disc
- Locking the alternator is done with the special bit
- Actuation of the screws is carried out with the union nut
- Also for checking screws
- Allows for the releasing and securing of the central nut at the same time as counter holding the belt disc shaft
- Internal square drive to DIN 3120/ISO 1174 with ball reception



150.3155	mm	Hex Ø mm	Span	L mm	163
	8.0	22.0	33	96.0	

V-Ribbed Alternator combination key - internal hexagon

- For the assembly and disassembly of free-running belt discs when changing alternator or the belt disc
- Locking the alternator is done with the special bit
- Actuation of the screws is carried out with the union nut
- Also for checking screws
- Allows for the releasing and securing of the central nut at the same time as counter holding the belt disc shaft
- Internal square drive to DIN 3120/ISO 1174 with ball reception



	mm	Nut Ø mm	Teeth	L mm	g
150.3156	10,0	22,0	33	96,0	163

V-Ribbed Alternator combination key - XZN

- For the assembly and disassembly of free-running belt discs when changing alternator or the belt disc
- Locking the alternator is done with the special bit
- Actuation of the screws is carried out with the union nut
- Also for checking screws
- Allows for the releasing and securing of the central nut at the same time as counter holding the belt disc shaft
- Internal square drive to DIN 3120/ISO 1174 with ball reception

Application range: Audi, BMW, Seat, Škoda, Mercedes, Opel, Peugeot, Porsche, Renault, etc.



	Nut Ø mm	Teeth	L mm	g	
150.3102	M10	19,5	33	115,0	170

V-Ribbed Alternator combination key - XZN

- For the assembly and disassembly of free-running belt discs when changing alternator or the belt disc
- Locking the alternator is done with the special bit
- Actuation of the screws is carried out with the union nut
- Also for checking screws
- Allows for the releasing and securing of the central nut at the same time as counter holding the belt disc shaft
- Internal square drive to DIN 3120/ISO 1174 with ball reception

Application range: Renault Megane, Scenic, Kangoo



	Nut Ø mm	Teeth	L mm	g	
150.3135	M10	28,0	33	96,0	300

V-Ribbed Alternator combination key - TX

- For the assembly and disassembly of free-running belt discs when changing alternator or the belt disc
- Locking the alternator is done with the special bit
- Actuation of the screws is carried out with the union nut
- Also for checking screws
- Allows for the releasing and securing of the central nut at the same time as counter holding the belt disc shaft
- Internal square drive to DIN 3120/ISO 1174 with ball reception

Application range: BMW F20, Mercedes A class, C class, Renault 1.9 DTI

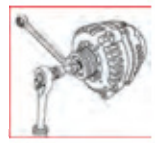


	Nut Ø mm	Teeth	L mm	g	
150.3101	T50	19,5	33	115,0	170

V-Ribbed Alternator combination key - internal hexagon

- For the assembly and disassembly of free-running belt discs when changing alternator or the belt disc
- Locking the alternator is done with the special bit
- Actuation of the screws is carried out with the union nut
- Also for checking screws
- Allows for the releasing and securing of the central nut at the same time as counter holding the belt disc shaft
- Internal square drive to DIN 3120/ISO 1174 with ball reception

Application range: Volvo, etc.



	mm	Nut Ø mm	Teeth	L mm	g
150.3157	10,0	22,0	33	70,0	163

V-Ribbed Alternator combination key - internal hexagon

- For the assembly and disassembly of free-running belt discs when changing alternator or the belt disc
- Locking the alternator is done with the special bit
- Actuation of the screws is carried out with the union nut
- Also for checking screws
- Allows for the releasing and securing of the central nut at the same time as counter holding the belt disc shaft
- Internal square drive to DIN 3120/ISO 1174 with ball reception

Application range: Volvo C30, Toyota, etc.



	mm	mm	g
150.3175	10,0	17,0	200

consists of:

		g
150.3176	Union nut 17.00 mm	40
150.3177	Union nut with 3 pins	120
150.3201	Socket 10mm	40

V-Ribbed Alternator combination key set

- For the assembly and disassembly of free-running belt discs when changing alternator or the belt disc
- Locking the alternator is done with the special bit
- Actuation of the screws is carried out with the union nut
- Also for checking screws
- Allows for the releasing and securing of the central nut at the same time as counter holding the belt disc shaft
- Internal square drive to DIN 3120/ISO 1174 with ball reception
- Suitable for a wide range of applications
- Saves the removal of additional parts, e.g. cooler

Application range: Audi, BMW, Fiat, Ford, Mercedes, Opel, Porsche, Renault, Peugeot, Seat, Škoda, Volkswagen, etc.



		g
150.3200	5 pcs V-Ribbed Alternator combination key set	310

consists of:

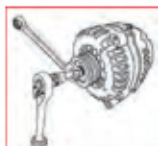
		g
150.3110	10 mm special bit multi-tooth, M10, 75 mm	60
150.3112	10 mm Special-bit TX, T50, 75 mm	60
150.3201	Insert wrench insert 10 mm	40
150.3202	Hexagonal adapter Ø 19 mm	110
150.3203	Multi-toothed Adapter, Ø 17 mm	40



V-Ribbed Alternator combination key set

- For the assembly and disassembly of free-running belt discs when changing alternator or the belt disc
- Locking the alternator is done with the special bit
- Actuation of the screws is carried out with the union nut
- Also for checking screws
- Allows for the releasing and securing of the central nut at the same time as counter holding the belt disc shaft
- Internal square drive to DIN 3120/ISO 1174 with ball reception
- Suitable for a wide range of applications
- Saves the removal of additional parts, e.g. cooler

Application range: Bosch and Magneti Marelli alternators, Audi, BMW, Fiat, Ford, Mercedes, Opel, Porsche, Renault, Peugeot, Seat, Škoda, Volkswagen, etc.



150.3100	13 pcs	V-Ribbed Alternator combination key set	1.20
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consists of:

150.3101	Combination wrench 1/2", TX 50 x 33 teeth, l = 110 mm	170
150.3102	Combination wrench 1/2", XZN® M10 x 33 teeth, l = 110 mm	170
150.3103	Multi tooth usage SW 15 x 33 tooth, bored	50
150.3104	Multi tooth usage SW 22 x 33 tooth, bored	30
150.3105	Adaptor for Belt Pulley wrench, SW 22, l = 30 mm, bored	70
150.3106	Special adaptor SW 17 with 4 lugs Ø4mm, bored	120
150.3107	Special 10 mm hexagon socket 8 mm, l = 75 mm	60
150.3108	Special 10 mm hexagon socket 10 mm, l = 75 mm	60
150.3109	Special bit 10 mm, XZN® M8, l = 75 mm	60
150.3110	Special bit 10 mm, XZN® M10, l = 75 mm	60
150.3111	Special Bit 10 mm, TX 40, l = 75 mm	60
150.3112	Special Bit 10 mm, TX 50, l = 75 mm	60
918.1271	1/2" CHROMEplus® Bit-Adapter-Socket with clamping ring, 1/2" x 10 mm	40

BELT TENSION CHECKER

Timing belt tensions test instrument

- For inspection of the timing post tensioning
- For the timing belt on the combustion engine
- With mm scale
- 10N (~1kp corresponds a revolution)
- Special steel

Application range: Can be used everywhere there is the technical data for the allowable through bend of the timing belt in mm in a certain power in N or kp revolutions



Technical data:
 Scale division: in mm
 Measurement mode: mechanical (spring)
 Adjusting nut revolution around 360°: 1.0
 Adjusting nut pitch: 1.0/10.0 mm

150.3015	100.0	0.0-20.0 mm	260
----------	-------	-------------	-----

Electronic timing belt tension tester

- For testing the tension of toothed belts and V-ribbed belts
- Measurement using the latest method = frequency measurement in Hertz
- With data log, setting values and correct position of the measuring sensor on the belt drive
- One man operation, easy to use
- LED display and acoustic measuring signal
- Automatic shutdown after 120 seconds
- In durable plastic storage case

Application range: Maintenance of vehicles, replacement of belts, suitable for passenger cars up to LCV



Technical data:
 Power requirement: 9V block battery
 Working range: 30-520 Hz
 Cable length: 1.2 m

150.3165	8 pcs	Electronic timing belt tension tester	1.11
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PULLING TOOL

Drawing off lining

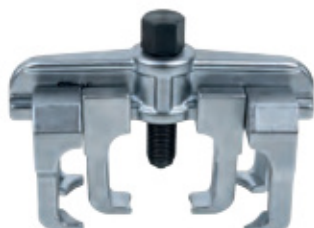
- For drawing off the shoulder housings interior ring of light machines, motor parts and other machine parts
- Special steel



670.0221	Ø mm	L mm	max N-m	mm	mm	mm	kg
	5-32	135	60	17	M14x1.5 x 130	1.40	

Universal camshaft solid wheel puller 2 arm

- Four special hooks for 5 and 6 armed spoked wheels
- Suitable for many VAG models
- Extremely robust spindle with inductively hardened thread
- Special steel



670.0211	A mm	B mm	max l mm	mm	mm	mm	mm	mm	mm	mm	kg
	130	44	2.5	M14x1.5 x 55	17	4	9	20	15	900	

Universal 2 arm puller

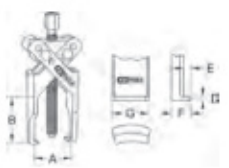
- Legs are adjustable in the working depth
- Independent pressure of the hooks
- Extremely robust spindle with inductively hardened thread
- Special steel



620.5201	A mm	B mm	max l mm	mm	mm	mm	mm	mm	mm	mm	kg
	5-100	70/85	1.5	M10 x 105	12	2.5	4.5	8.5	23	0.40	
620.5202	10-140	85/120	3.5	M14x1.5 x 130	17	3.5	5	10	31	0.90	
620.5203	15-140	125/155	4.5	M14x1.5 x 200	17	3.5	5	10	31	1.10	

Universal 2 arm puller set with narrow legs

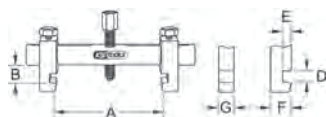
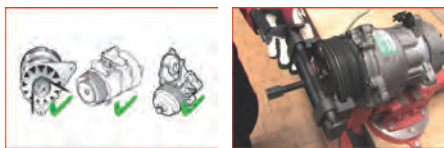
- Legs are adjustable in the working depth
- Ideal for confined spa es
- Independent pressure of the hooks
- Extremely robust spindle with inductively hardened thread
- Special steel



620.5301	A mm	B mm	max l mm	mm	mm	mm	mm	mm	mm	mm	kg
	5-100	70/85	1	M10 x 105	12	2.5	4.5	8.5	11	0.40	
620.5302	15-140	125/155	2	M14x1.5 x 200	17	3.5	5	11	12	1.00	

Universal belt pulley puller 2 arm

- For grooved belt pulleys
- Draw-off arms with locking device
- Clamp compresses hooks firmly
- Prevents slippage
- Less space requirement through compact method of building
- Suited for working on and finishing engines
- Special steel

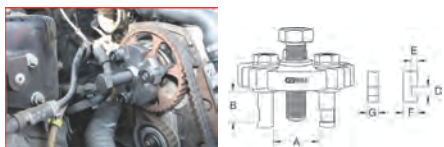


	A	B	C	D	E	F	G	H
	mm	mm	mm	mm	mm	mm	mm	mm
150.3170	40-165	30	M12 x 75	17	10	9	18	35
								1.50



Universal belt pulley puller 3 arm

- For the damage free drawing off of pulley belts
- Universal suitable for several diameters and different hole divisions
- Less space requirement through compact method of building
- Suited for working on and finishing engines
- Special steel



	A	B	C	D	E	F	G	H
	mm	mm	mm	mm	mm	mm	mm	mm
150.3130	90	30	M16x1,5 x 75	24	10	6	11	12
								900

Universal belt pulley puller 3 arm

- For the damage free drawing off of pulley belts
- Universal suitable for several diameters and different hole divisions
- Less space requirement through compact method of building
- Suited for working on and finishing engines
- Special steel



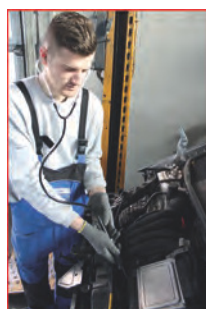
	A	B	C	D	E	F	G	H
	mm	mm	mm	mm	mm	mm	mm	mm
150.3194	30-60	30	M14x1,5 x 75	19	10	6	11	11
								745

STETHOSCOPE

Mechanics stethoscope

- Very flexible
- Serves the acoustic test and evaluation of a component under load
- Quick and precise error detection from the sound
- With steel tip

Application range:
 Engine: Valves, bearings, piston pins
 Alternator: Bearing sounds
 Differential: Barrel sounds
 Bodywork: Creak and squeak sounds

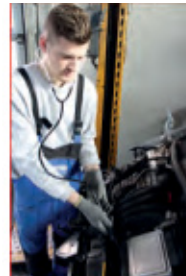


	L	H
	mm	mm
150.1645	1120.0	200

Mechanic's stethoscope, electronic

- Very flexible
- Serves the acoustic test and evaluation of a component under load
- Quick and precise error detection from the sound
- Includes 9 V block battery
- With steel tip

Application range:
 Engine: Valves, bearings, piston pins
 Alternator: Bearing sounds
 Differential: Barrel sounds
 Bodywork: Creak and squeak sounds



	Cable length	Length	H
	mm	mm	mm
150.1410	1160.0	190.0	100

Electronic professional stethoscope

- For the professional defect diagnosis
- Serves the acoustic test and judgment of a component under load
- Delivers fast, absolutely clear and unambiguous test results over sounds
- Contains 6 independent sensors that can be mounted for example on the vehicle floor or in the engine compartment for ease of use
- Simple coordination of the defect source through colour coded cable and colour table on the box
- In durable plastic storage case

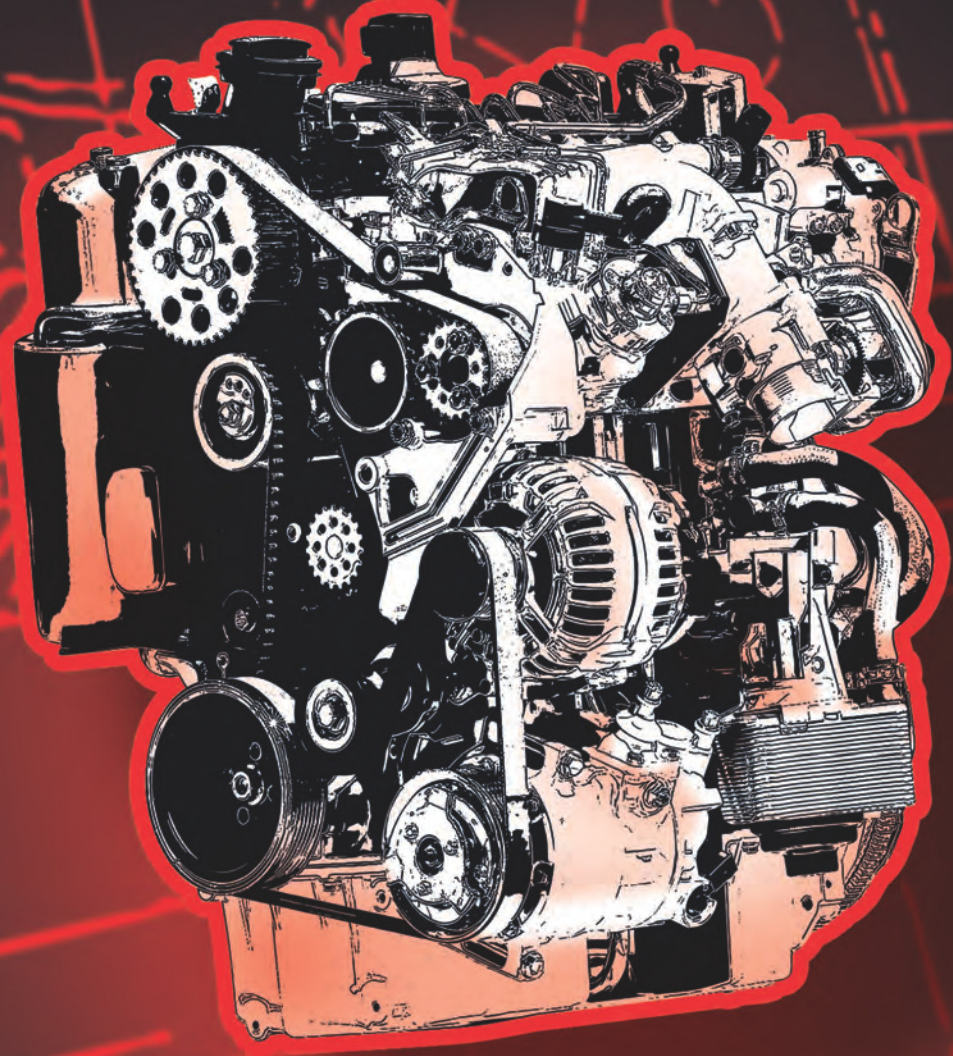
Application range:
 Engine: Valves, bearings, piston pins
 Alternator: Bearing sounds
 Differential: Barrel sounds
 Bodywork: Creak and squeak sounds



	Quantity	Description	H
150.1695	18 pcs	Electronic professional stethoscope	2,50

consists of:

	Description	H
150.1695-1	Headset for 150.1695	350
150.1695-2	Amplifier or 150.1695	115
150.1695-3	Hand held stethoscope for 150.1695	165
150.1695-4	Velcro strap for 150.1695, 8 pcs	9
150.1695-5	Sensor for 150.1695	10
150.1695-6	Colour coded cable for 150.1695, 6 pcs	755



Innovation is our mission!



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THE RIGHT SPECIAL TOOL FOR EVERY USE!

With our special tool database, which is based upon information from Autodata®, we can help you find the right engine adjustment tools for your work:

- directly from the OE number
- from the vehicle selection
- from the engine code.

AFTERMARKET



Wir möchten dabei helfen, die richtigen Motoreinstellwerkzeuge für Ihre Arbeiten zu finden.
Wählen sie unten die entsprechenden Daten zu ihrem Modell und sie bekommen eine Liste von Werkzeugen, die wir für sie anbieten.

Hersteller: Audi
Modell: A5 Coupe/Cabriolet
Baujahr: 2010
Hubraum: 2.7
Motorkennung: CAMA

Sie kennen den Motorcode oder die OEM-Nummer?
Suchen sie hier und sie finden eine Liste der angebotenen Werkzeuge.

OEM:
Motorkennung:

Suchen

KS Code	Beschreibung	OEM
400 0159	Arbeitsband für Kurbelwelle	3342
400 9919	Fliehkraft für E-Pumpenrad VAG	3359
400 1156	Lüfterwerkzeug für Nockenwellenstellung	T40051
400 1155	Nockenwellen-Fliehkraft-Satz 2-3ig	T40060
400 1157	Kettenrad-Spanner	T40062
400 9043	Motor-Durchdrehvorrichtung VAG 6+8Zyl. 2.4+3.2 FS	T40058
400 1153	Kurbelwellen-Drehvorrichtung Typ 2	T40049

OE



YOUR REQUIREMENTS, OUR SOLUTIONS!

AUDI | BMW | CHRYSLER | CITROËN | FIAT | FORD | GM | HONDA | LEXUS | MAZDA |
MERCEDES | MITSUBISHI | MORRIS | NISSAN | OPEL | PEUGEOT | RENAULT | TOYOTA |
TRIUMPH | VOLKSWAGEN AUDI GROUP | VOLVO

www.motoreinstellwerkzeuge.de

www.timingtools.de



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Innovation is our mission!

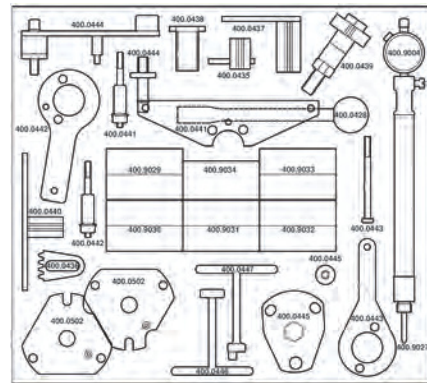
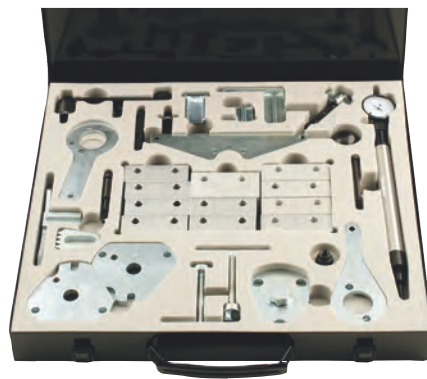
ALFA ROMEO

Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft and cam shaft
- Suitable for pre-tensioning timing belt tensioner on the automatic pulley
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: universal usage on many Italian vehicles, in particular **Alfa Romeo, Fiat, Lancia** vehicles with 1.4 / 1.6 / 1.8 / 2.0 / Twinspark 1.2 / 1.4 / 1.6 / 1.8 16 V petrol engines 1.6 / 1.8 / 1.9D / TD / 2.0 / 2.1 12V / 2.4 diesel engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



			🔒
400.0425	34 pcs	Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set	7.57

consists of:

			🔒
400.0428	Tensioning tool - pry	170	
400.0435	Flywheel locking tool	57	
400.0436	Flywheel locking tool	135	
400.0437	Flywheel locking tool	100	
400.0438	Flywheel locking tool	51	
400.0439	Flywheel locking tool	317	
400.0440	Flywheel locking tool	136	
400.0441	Crankshaft timing tool (2)	154	
400.0442	Crankshaft timing tool (2)	154	
400.0443	Crankshaft timing tool (3)	160	
400.0444	Tensioning tool	240	
400.0445	Camshaft locking tool (2)	530	
400.0446	Balancer shaft belt tensioning tool	97	
400.0447	Tensioning tool - pry	70	
400.0502	Camshaft locking tool (2)	400	
400.9004	Precision-dial indicator gauge 0 - 10 mm	78	
400.9027	TDC determining pin Ø 5.0 mm / dial indicator bracket M14 x 1.25	288	
400.9029	Camshaft locking tool (2)	276	

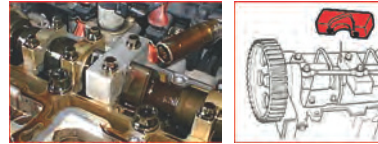
consists of:

			🔒
400.9030	Camshaft locking tool (2)	251	
400.9031	Camshaft locking tool (2)	272	
400.9032	Camshaft locking tool (2)	269	
400.9033	Camshaft locking tool (2)	276	
400.9034	Crankshaft timing tool	178	

Alfa Romeo / Fiat / Lancia camshaft alignment tools

- For the professional engine repair
- For locking the cam shaft wheels (TDC position)
- Secure hold thanks to optimal positioning
- Very high degree of accuracy

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



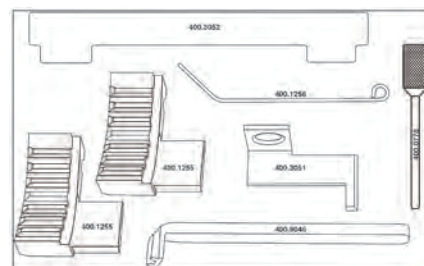
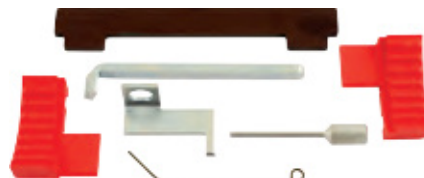
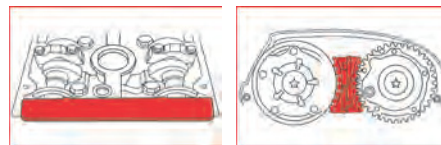
			🔒
X	Suitable for		
400.9028	4	156 2.5 V6 (> 1997)	690
400.9029	2	145/146 1.8, 2.0 Twin Spark (> 1995), Spider/GTV 2.0 16v (> 1995)	276
400.9030	2	145/146 1.4, 1.6 Twin Spark (> 1995), 155/156 Twin Spark (> 1996)	251
400.9037	2	147 1.6 (105bhp) (>2004)	267
400.9038	2	147 1.6 (120bhp) (>2004)	270
400.9039	2	156 2.0 JTS (>2006)	267

Alfa Romeo / Fiat / GM / Opel - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy

Application range: Chevrolet Cruze, Orlando with 1.4 / 1.6 / 1.8 engines, Opel Astra-G, Astra-H, Corsa-D, Insignia, Meriva, Signum, Vectra-C, Zafiro-B, Fiat Croma, Alfa Romeo 159 (engine code: Z / A / 939A4.000)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



			🔒
400.3050	7 pcs	Alfa Romeo / Fiat / GM / Opel - Engine Timing Tool Set	424

consists of:

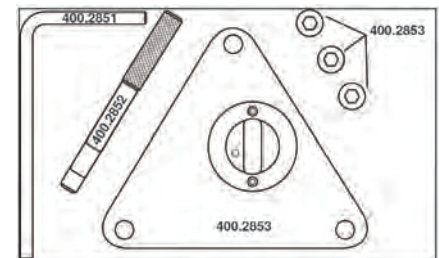
			🔒
400.0778	Locking pin	20	
400.1255	Camshaft locking tool (2)	56	
400.1256	Tensioner locking pin	3	
400.3051	Flywheel holding tool	32	
400.3052	Camshaft Locking Bar	148	
400.9046	Flywheel locking tool	80	

Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set

- For the professional engine repair
- Especially for chain-driven engines
- Very high degree of accuracy
- In durable steel storage case

Application range: Fiat Panda, Punto, 500, 500c, Alfa Romeo Mito, Lancia Ypsilon (engine code: 313A2.000)

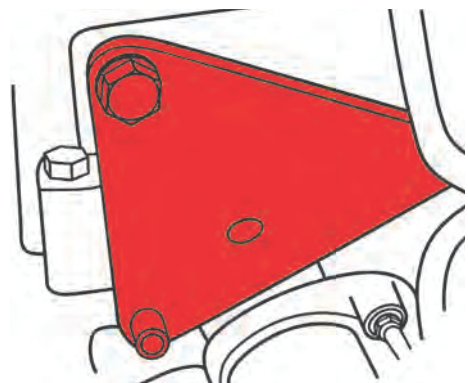
Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



			🔒
400.2850	6 pcs	Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set	1.60

consists of:

			🔒
400.2851	Flywheel locking tool	460	
400.2852	Pulley locking pin	550	
400.2853	Camshaft Locking Plate with screws	490	



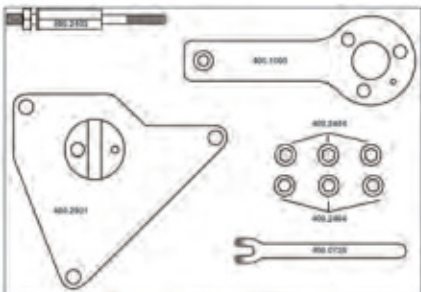
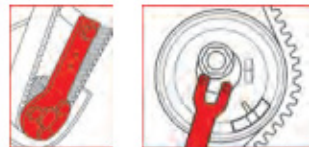


Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Alfa Romeo Mito, Giulietta MultiAir 105, MultiAir Turbo 135, 163 / 170 (2009-2013) Fiat Punto Evo, Punto, Bravo (2009-2013) Lancia Delta (2010-2013) - (engine code: 955A6.000 / 955A7.000 / 955A8.000 / 955A2.000 / 940A2.000)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2900	10 pcs	Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set	1,40
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consists of:

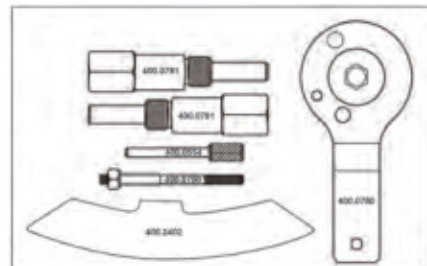
400.0728	Tensioner adjusting tool	30
400.1005	Crankshaft locking tool	7
400.2403	Stud assembly	33
400.2404	Socket head screw M8 x 20 mm	13
400.2901	Tensioner adjusting tool	504

Alfa Romeo / Fiat - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft or cam shaft and injection pump
- Very high degree of accuracy
- In durable steel storage case

Application range: Fiat vehicles with 1.6 / 1.9 / 2.4 JTD Multi-jet diesel engines, Alfa Romeo with 2.0 JTD diesel engines (engine code: 939B3.000)

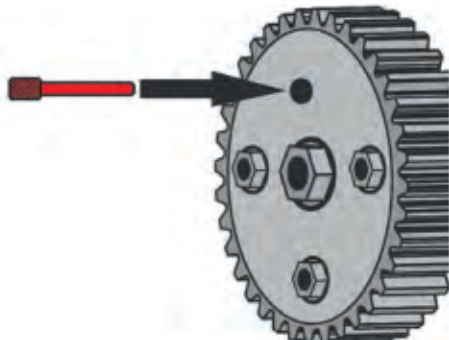
Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2400	7 pcs	Alfa Romeo / Fiat - Engine Timing Tool Set	1,46
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consists of:

400.0554	Locking pin Ø 6.0 mm	19
400.0780	Crankshaft pulley setting tool (3)	260
400.0781	Camshaft timing pin set (2)	180
400.2402	Flywheel sprocket alignment tool	130

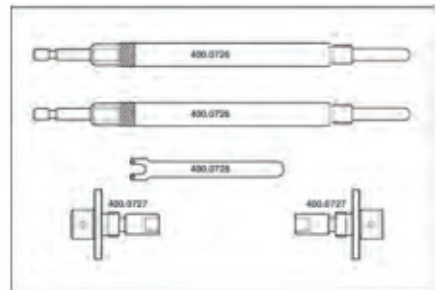


Alfa Romeo / Fiat - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- Very high degree of accuracy
- In durable steel storage case

Application range: Alfa Romeo Giulietta, Mito, Fiat 500, Brava, Bravo, Grande Punto, Marea, Marea Weekend, Marengo, Palio Weekend, Panda, Punto Classic, Ritmo, Stilo, Idea, Lancia Delta, Susa, Ypsilon with 1.2 16V engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0725	5 pcs	Alfa Romeo / Fiat - Engine Timing Tool Set	989
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consists of:

400.0726	Piston height gauge (2)	250
400.0727	Camshaft locking tool (2)	130
400.0728	Tensioner adjusting tool	30

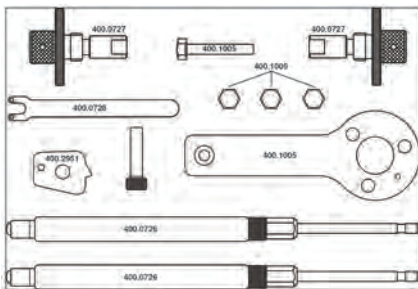


Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Alfa Romeo Giulietta , MiTo Fiat 500, Brava, Bravo, Grande Punto, Marea, Marea Weekend, Marengo, Palio Weekend Panda, Punto, Punto Classic, Ritmo, Stilo, Idea Lancia Delta, Musa, Ypsilon

Please carry out an up-to-date cross reference test for the specific ehicle on www.timingtools.de



				K
400.2950	12 pcs	Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set	1,22	

consists of:

				K
400.0726	1	Piston height gauge (2)	250	
400.0727	1	Camshaft locking tool (2)	130	
400.0728	1	Tensioner adjusting tool	30	
400.1005	5	Crankshaft locking tool	7	
400.2951	1	Camshaft pulley holding tool(2)	126	

Alfa Romeo phase adjuster

- For the professional engine repair
- For the safe removal of the cam shaft phase adjuster (variator)
- Special steel
- Very high degree of accuracy

Application range: Alfa Romeo 145/145 Twin Spark with 1.4 engines with cam shaft variator

Please carry out an up-to-date cross reference test for the specific ehicle on www.timingtools.de



				K
400.9005	Alfa Romeo	D mm	mm	
		57,0	24,0	283

Alfa Romeo automatic tension pulley wrench

- Eccentric
- Suitable for the assembly and disassembly of the timing belt
- For adjusting the timing belt tension on the automatic pulley
- Not suitable for balancing belts
- With t-handle
- With plastic-coated handle
- Chrome vanadium

Application range: Alfa Romeo 145, 146 for 1.4L and 1.6L Twin Spark engines >1996, Alfa Romeo 155, 156 for 1.6L Twin Spark engines >1996



				K
150.1253	Alfa Romeo	Length mm	83,0	80

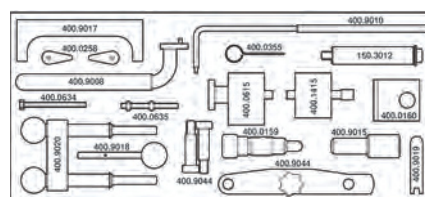
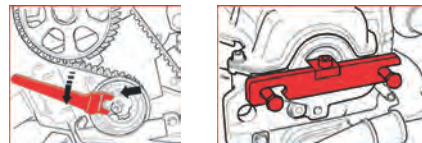
AUDI

VAG - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft or cam shaft
- Very high degree of accuracy
- In durable steel storage case

Application range: Audi, Seat, Škoda, Volkswagen with 1.4 / 1.6 / 1.8 / 2.0 Turbo / 2.2 / 2.3 / 1.8 / 2.0 16V, 2.6 / 2.8 with petrol engines and 1.0 / 1.2 / 1.3 / 1.4 / 1.9 TDi / 1.7 / 1.9 SDi / 2.5 TDi / 2.8 30V diesel engines

Please carry out an up-to-date cross reference test for the specific ehicle on www.timingtools.de



				K
400.2225	19 pcs	VAG - Engine Timing Tool Set	2,23	

consists of:

				K
400.0159	Crankshaft timing pin		120	

consists of:

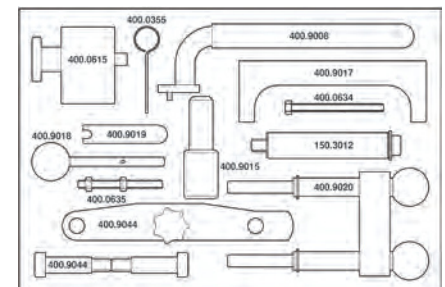
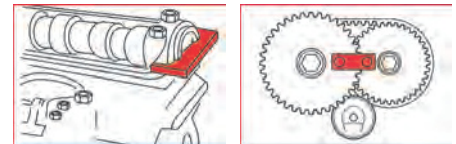
			K
400.9044	Camshaft setting strap		309
400.9020	Camshaft locking tool		340
400.9019	Tensioner locking tool		20
400.9018	Injection pump locking pin Ø 6.0 mm		20
400.9017	Camshaft setting strap		120
400.9015	Injection pump locking pin Ø 15.4 mm		126
400.9010	Automatic pulley wrench for pin-type face		230
400.9008	Automatic pulley wrench for pin-type face		206
400.1415	Crankshaft pulley setting tool		192
400.0635	Stud and nut M5 x 55,0 mm		8
400.0634	Locking screw M5 x 55,0 mm		8
400.0615	Crankshaft pulley setting tool		190
400.0355	Tensioner pushrod retension pin		1
400.0258	Shim tool (2)		3
400.0160	Camshaft timing tool (2)		118
150.3012	VAG front mask push back		170

VAG - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Audi A2 with 1.2, 1.4 TDI engines, A3 with 1.9 TDI engines (> 1996), A3, A4, A6 with 1.9TDI engines (>1999), Seat Toledo with 1.9 TDI engines (>1999), Škoda Octavia with 1.9 SDI/TDI engines (>1996), Volkswagen Golf, Bora with 1.9 SDI/TDI engines, New Beetle with 1.9 TDI engines (>1997), Lupo with 3L 1.2 TDI, Lupo, Polo 1.4 TDI, Golf, Bora 1.9 TDI engines (>1999)

Please carry out an up-to-date cross reference test for the specific ehicle on www.timingtools.de



			K
400.0625	12 pcs	VAG - Engine Timing Tool Set	1,73

consists of:

			K
400.0355	Tensioner pushrod retension pin		1
400.9044	Camshaft setting strap		309
400.9020	Camshaft locking tool		340

consists of:

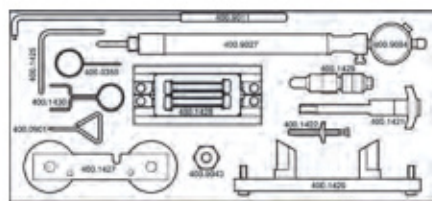
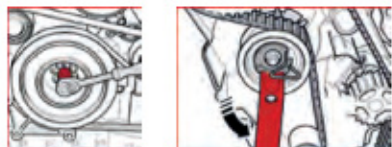
400.9019	Tensioner locking tool	20
400.9018	Injection pump locking pin Ø 6.0 mm	20
400.9017	Camshaft setting strap	120
400.9015	Injection pump locking pin Ø 15.4 mm	126
400.9008	Automatic pulley wrench for pin-type face	206
400.0635	Stud and nut M5 x 55.0 mm	8
400.0634	Locking screw M5 x 55.0 mm	8
400.0615	Crankshaft pulley setting tool	190
150.3012	VAG front mask push back	170

VAG - Engine Timing Tool Set

- For the professional engine repair
- Comprehensive set for locking timing chains
- Very high degree of accuracy
- In durable steel storage case

Application range: Audi A3, A4, A6, A8, Škoda Octavia, Volkswagen Polo, Golf, Touran, Passat (engine code: AXW / AXU / BAG / BLF / BKG / BLN / BLP / BUL / BPJ / BGB / BWA / BWE)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2300	17 pcs VAG - Engine Timing Tool Set	2.83

consists of:

400.0355	Tensioner pushrod retention pin	1
400.0901	Tensioning locking pin	4
400.1420	Camshaft alignment tool	802
400.1421	Chain tensioner retainer	40
400.1422	Chain tensioner retainer	17
400.1425	Tensioning locking pin	11
400.1427	Camshaft alignment tool	433
400.1428	Camshaft locking tool (4)	665
400.1429	Crankshaft timing pin	80
400.1430	Timing chain tensioner locking pin	10
400.9004	Precision-dial indicator gauge 0 - 10 mm	78
400.9011	Automatic pulley wrench for pin-type face	259
400.9027	TDC determining pin Ø 5,0 mm / dial indicator bracket M14 x 1.25	288
400.9043	VAG Crankshaft pulley bolt adaptor	140

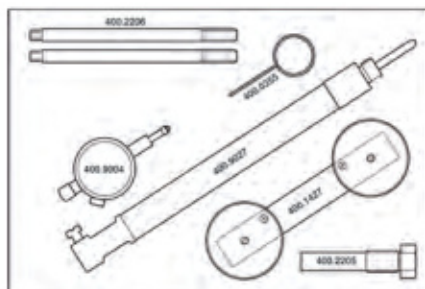


VAG - Engine Timing Tool Set

- For the professional engine repair
- For chain-driven vehicles
- Very high degree of accuracy
- In durable steel storage case

Application range: Audi A3, Volkswagen Polo, Golf, Jetta, Passat, Eos, Tiguan, Touran (engine code: AXU / BAG / BKG / BLF / BLN / BLP / BMV / BWK / CAXA)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2200	7 pcs VAG - Engine Timing Tool Set	2.11

consists of:

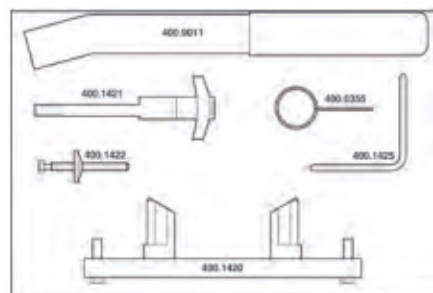
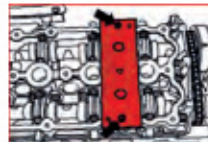
400.1427	Camshaft alignment tool	433
400.9027	TDC determining pin Ø 5,0 mm / dial indicator bracket M14 x 1.25	288
400.9004	Precision-dial indicator gauge 0 - 10 mm	78
400.2206	Crankshaft locking pin (2)	53
400.2205	Crankshaft locking pin	111
400.0355	Tensioner pushrod retention pin	1

VAG - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt or the chain
- Very high degree of accuracy
- In durable steel storage case

Application range: Audi vehicles (2003-2010) with 2.0 FSI and TFSI engines

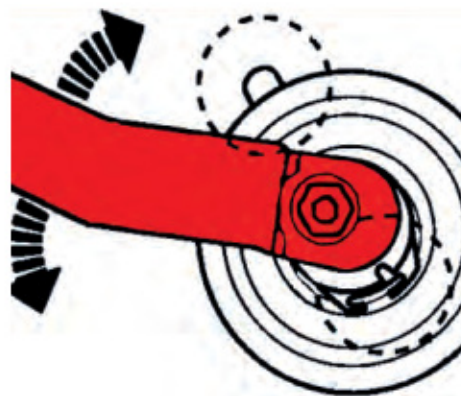
Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2175	6 pcs VAG - Engine Timing Tool Set	1.35

consists of:

400.0355	Tensioner pushrod retention pin	1
400.1420	Camshaft alignment tool	802
400.1421	Chain tensioner retainer	40
400.1422	Chain tensioner retainer	17
400.1425	Tensioning locking pin	11
400.9011	Automatic pulley wrench for pin-type face	259

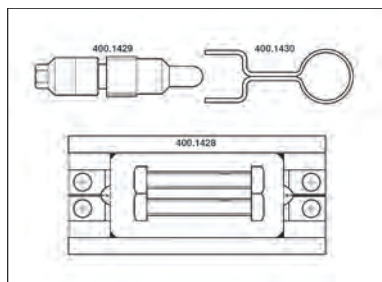


VAG - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft or cam shaft
- Very high degree of accuracy
- In durable steel storage case

Application range: Audi vehicles with V6, V8, V10 FSI engines

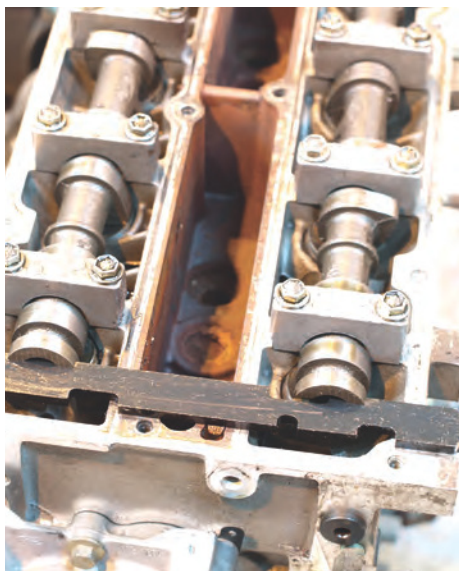
Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2250	6 pcs	VAG - Engine Timing Tool Set
		899

consists of:

400.1428	Camshaft locking tool (4)	665
400.1429	Crankshaft timing pin	80
400.1430	Timing chain tensioner locking pin	10



consists of:

400.9043	VAG Crankshaft pulley bolt adaptor	140

VAG - Engine Timing Tool Set

- For the professional engine repair
- Especially for timing wheel-driven vehicles
- For adjusting the injection adjuster via the cam shaft follower
- Very high degree of accuracy
- In durable steel storage case

Application range: Volkswagen Touareg, Transporter (> 2003) with 2.5 TDI engines (engine code: BAC / BLK / BPD / AXD / AXE / BLJ / BNZ / BPC) and 4.9D / TDI (engine code: AYH)

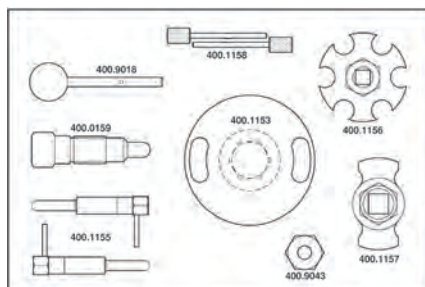
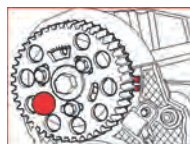
Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de

VAG - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: Audi A4 (2005-2009) with 2.7 TDI engine, A4 Quattro (2005-2006) with 2.0 TDI engine, Q7 with 3.0 TDI engine, Volkswagen Touareg (>2008), Phaeton (>2006) with 3.0 TDi V6 engine (engine code: BPP / BMZ / BUG / BUN)

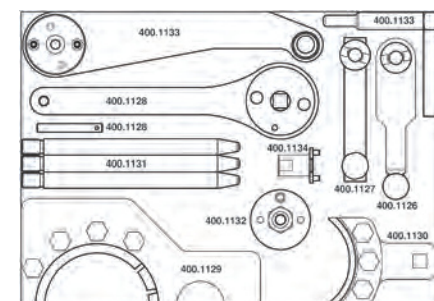
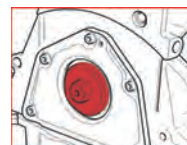
Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1150	10 pcs	VAG - Engine Timing Tool Set
		2,41

consists of:

400.0159	Crankshaft timing pin	120
400.1153	Crankshaft turning tool	354
400.1155	Camshaft locking pin (2)	47
400.1156	Camshaft alignment/locking tool	366
400.1157	Camshaft sprocket holding tool	120
400.1158	Timing pin Ø 3,3 mm (2)	12
400.9018	Injection pump locking pin Ø 6,0 mm	20



400.1125	12 pcs	VAG - Engine Timing Tool Set
		9,45

consists of:

400.1126	Camshaft locking tool	226
400.1127	Camshaft locking tool	174
400.1128	Crankshaft timing tool (2)	1194
400.1129	Camshaft gear retaining tool (big)	2769
400.1130	Camshaft gear retaining tool (small)	677

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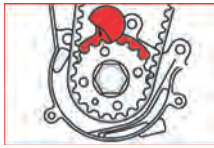
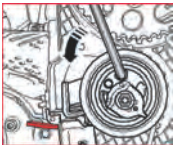
		9
400.1131	Guide pin set (3)	769
400.1132	Crankshaft turning tool (TDC-cylinder 1)	141
400.1133	Crankshaft alignment tool (TDC-cylinder 1)	998
400.1134	Camshaft compensation gear pre-tensioning tool	75

VAG - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt or the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: Audi, Seat, Škoda, Volkswagen vehicles including FSI and TFSI engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



consists of:

		9
400.9019	Tensioner locking tool	20
400.9018	Injection pump locking pin Ø 6.0 mm	20
400.9017	Camshaft setting strap	120
400.9015	Injection pump locking pin Ø 15.4 mm	126
400.9011	Automatic pulley wrench for pin-type face	259
400.9010	Automatic pulley wrench for pin-type face	230
400.9008	Automatic pulley wrench for pin-type face	206
400.9004	Precision-dial indicator gauge 0 - 10 mm	78
400.1430	Timing chain tensioner locking pin	10
400.1429	Crankshaft timing pin	80
400.1428	Camshaft locking tool (4)	665
400.1427	Camshaft alignment tool	433
400.1425	Tensioning locking pin	11
400.1422	Chain tensioner retainer	17
400.1421	Chain tensioner retainer	40
400.1420	Camshaft alignment tool	802
400.1415	Crankshaft pulley setting tool	192
400.0901	Tensioning locking pin	4
400.0635	Stud and nut M5 x 55.0 mm	8
400.0634	Locking screw M5 x 55.0 mm	8
400.0615	Crankshaft pulley setting tool	190
400.0355	Tensioner pushrod retensioning pin	1
400.0258	Shim tool (2)	3
400.0160	Camshaft timing tool (2)	118
150.3012	VAG front mask push back	170

VAG - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt or the chain
- Very high degree of accuracy
- In durable steel storage case

Application range: Audi A3, A4, A5, A6, Q5, Volkswagen Golf, Tiguan, Passat, Eos, Seat Exeo

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de

consists of:

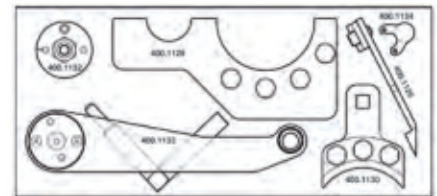
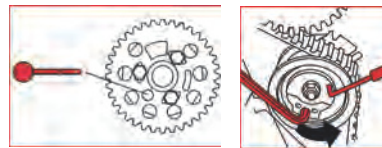
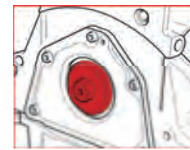
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400.1415	Crankshaft pulley setting tool	192
400.1425	Tensioning locking pin	11
400.2101	Injection pump/camshaft alignment pin	14
400.2104	Sprocket holding tool	179
400.2105	Cam sprocket hub puller	581
400.2107	Setting tool	72
400.2109	Crankshaft pulley locking tool (bored)	300
400.2153	Tensioner adjuster Ø 2.5 mm	70
400.2151	Tensioner adjuster Ø 6.0 mm	20

VAG - Engine Timing Tool Set

- For the professional engine repair
- For timing wheel-driven engines
- Very high degree of accuracy
- In durable steel storage case

Application range: Volkswagen Touareg, Transporter (engine code: AXE / AXD / BAC / BLK / BLJ / BNZ / BPC / BPE / BPD)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



		9
400.2500	6 pcs VAG - Engine Timing Tool Set	6.50

consists of:

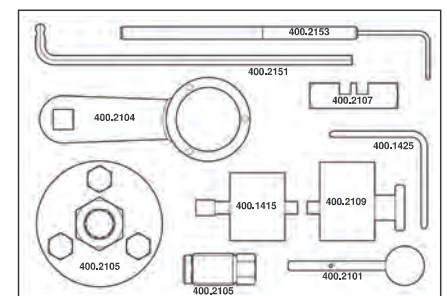
		9
400.1126	Camshaft locking tool	226
400.1129	Camshaft gear retaining tool (big)	2769
400.1130	Camshaft gear retaining tool (small)	677
400.1132	Crankshaft turning tool (TDC-cylinder 1)	141
400.1133	Crankshaft alignment tool (TDC-cylinder 1)	998
400.1134	Camshaft compensation gear pre-tensioning tool	75



		9
400.1400	35 pcs VAG - Engine Timing Tool Set	7.94

consists of:

		9
400.0159	Crankshaft timing pin	120
400.9044	Camshaft setting strap	309
400.9043	VAG Crankshaft pulley bolt adaptor	140
400.9027	TDC determining pin Ø 5.0 mm / dial indicator bracket M14 x 1.25	288
400.9020	Camshaft locking tool	340



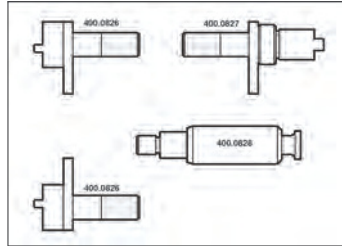
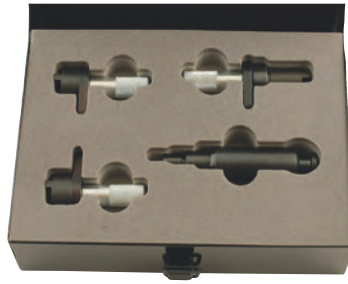
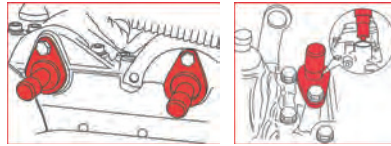
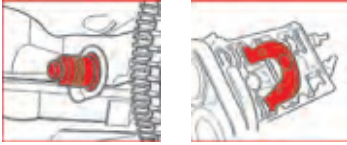
		9
400.2100	9 pcs VAG - Engine Timing Tool Set	2.61

VAG - Engine Timing Tool Set

- For the professional engine repair
- Especially for chain-driven engines
- Very high degree of accuracy
- In durable steel storage case

Application range: Audi A4, A6 (engine code: ASN / BBJ)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0825	4 pcs	VAG - Engine Timing Tool Set	747
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consists of:

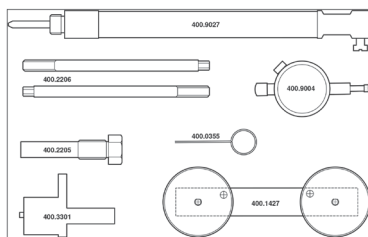
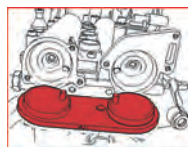
400.0826	Camshaft aligning tool 12V (2)	97
400.0827	Camshaft aligning tool 6V	113
400.0828	Crankshaft locking pin 6V/12V	115

VAG - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Volkswagen and other VW Group vehicles 1.4 / 1.6 FSi and 1.4 TSi and 1.2 TFSi / FSi engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.3300	8 pcs	VAG - Engine Timing Tool Set	2.14
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consists of:

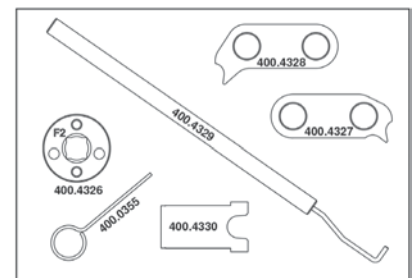
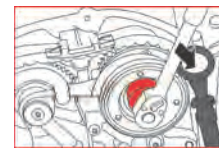
400.0355	Tensioner pushrod retention pin	1
400.9027	TDC determining pin Ø 5.0 mm / dial indicator bracket M14 x 1.25	288
400.1427	Camshaft alignment tool	433
400.2205	Crankshaft locking pin	111
400.2206	Crankshaft locking pin (2)	53
400.3301	Camshaft locking tool	174
400.9004	Precision-dial indicator gauge 0 - 10 mm	78

VAG - Engine Timing Tool Set

- For the professional engine repair
- Expansion set for use alongside 400.2300 / 400.3300
- Very high degree of accuracy
- In durable steel storage case

Application range: Audi, Seat, Škoda, Volkswagen vehicles with 1.8 / 2.0 TFSI and FSI engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.4325	7 pcs	VAG - Engine Timing Tool Set	1.87
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consists of:

400.0355	Tensioner pushrod retention pin	1
400.4326	Cam shaft control valve removal tool	60
400.4327	Cam shaft clamp external	130
400.4328	Cam shaft clamp internal	130
400.4329	Oil pumps securing pin	160
400.4330	Timing chain wrench	30

400.2275	5 pcs	VAG - Engine Timing Tool Set	2.46
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consists of:

400.0355	Tensioner pushrod retention pin	1
400.2276	Crankshaft locking tool	80
400.2277	Camshaft locking tool (2)	1050
400.2278	Camshaft sprocket adjusting tool	80

VAG - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Volkswagen Lupo, Polo with 1.2 6V / 12V engines, Seat Cordoba, Ibiza with 1.2 engines (2002-2009), Škoda Fabia II, Roomster with 1.2P engines (engine code: AWY / BMD / AZQ / BME / BZG)

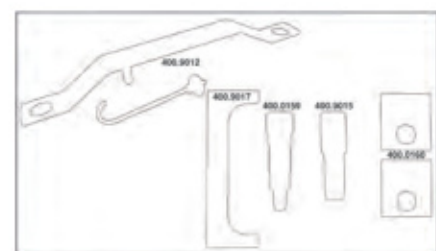
Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de

VAG - Engine Timing Tool Set

- For the professional engine repair
- Necessary to separate the V6 2 valve engine cam shafts from each other
- Very high degree of accuracy

Application range: Audi 80 (1991-2002) with 2.6 / 2.8 engines, A4 with 2.6 / 2.8 engines, 100 with 2.6 / 2.8 engines, A8 with 2.8 engines, Cabrio, Coupe with 2.6 / 2.8 engines (engine code: AAH, ABC)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0225	6 pcs. VAG - Engine Timing Tool Set	3.02
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consists of:

400.0159	Crankshaft timing pin	120
400.0160	Camshaft timing tool (2)	118
400.9012	Camshaft locking tool	2012
400.9015	Injection pump locking pin Ø 15.4 mm	126
400.9017	Camshaft setting strap	120

VAG Camshaft fixing tool

- For the professional engine repair
- For locking the cam shafts
- Allows for correct engine adjustment
- Very high degree of accuracy

Application range: Audi 80, 90, A4, A6, A8 with 2.6 V6 12V engines (engine code: ABC, ACZ) and with 2.8 V6 12V engines (AAH, AEJ)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



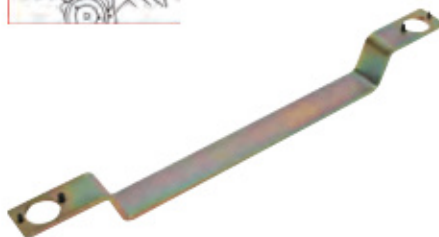
400.9012	VAG Camshaft fixing tool	2.01
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VAG Camshaft fixing tool

- For the professional engine repair
- For locking the cam shafts
- Allows for correct engine adjustment
- Very high degree of accuracy

Application range: Audi A4 2.4 and 2.8 1997-2002, A6 2.4 1997-2002, A6 2.8 1997-2002, A8 2.8 1997-2002, S4 2.7 Turbo 1997-2001 and Volkswagen Passat 2.4 1996-2002, Passat 2.8 30V 1996-2001 (engine code: ACK, ALG, APR, AOD)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



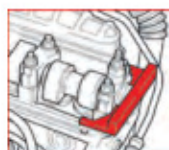
400.9013	VAG Camshaft fixing tool	2.41
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VAG - Engine Timing Tool Set

- For the professional engine repair
- Range for changing timing belts or for working on timing devices
- Very high degree of accuracy
- In durable steel storage case

Application range: VAG group vehicles with 2.4 engines, in particular Volkswagen T2, T3, T4 Transporter, LT, Golf, Passat and Audi (engine code: AAB, AJA, ADG, ABL, 1X, 1Y, 1W, 1V, CS, CW, KY, JR, JX, JD, JP, 1Z, AAT, AEL, AAZ, AHU, AFN, AEY, AVG, ALE, AFF, AHH, ACV, AHY, AJT, AUF, AXG, AXL, AYC)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2125	5 pcs. VAG - Engine Timing Tool Set	951
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consists of:

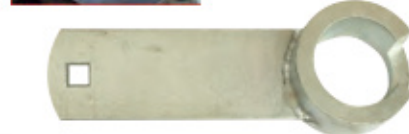
400.0258	Shim tool (2)	3
400.9015	Injection pump locking pin Ø 15.4 mm	126
400.9017	Camshaft setting strap	120
400.9042	Pulley wheel counter hold wrench	714

VAG pulley wheel counter hold wrench

- For the professional engine repair
- Simple assembly and disassembly of the crank shaft pulley wheel or vibration dampers
- Special profiles allows for counter holding when releasing or securing the crank shaft central screw
- The handle can be lengthened via the 3/4" internal square
- Very high degree of accuracy

Application range: VAG group vehicles with 2.4 engines, in particular Volkswagen T2, T3, T4 Transporter, LT, Golf, Passat and Audi (engine code: AAB, AJA, ADG, ABL, 1X, 1Y, 1W, 1V, CS, CW, KY, JR, JX, JD, JP, 1Z, AAT, AEL, AAZ, AHU, AFN, AEY, AVG, ALE, AFF, AHH, ACV, AHY, AJT, AUF, AXG, AXL, AYC)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



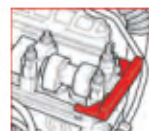
400.9042	VAG pulley wheel counter hold wrench	714
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VAG Camshaft ruler

- For the professional engine repair
- Ideally suited to fixing the cam shaft
- Simple handling
- Special steel
- Very high degree of accuracy

Application range: VAG group vehicles with diesel engines, in particular Volkswagen T2, T3, T4, LT, Golf, Passat, Audi with 2.4D 6 cylinder and 2.4 TD 5 cylinder TDI engines, as well as all older diesel engines such as 1.6 D and 1.7 D GTD (engine code: CS, CW, JD, JX, JP, JR, 1X, 1Y, 1Z, KY, AAZ, AAT, AEL, AFN, AFF, AHU, AHH, AVG, AAB, AJA, AHY)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



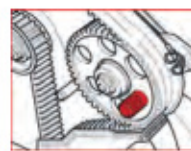
400.9017	VAG Camshaft ruler	120
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VAG fixing pin injection pump wheel

- For the professional engine repair
- Ideally suited to securing the injection pump
- Simple handling
- Special steel
- Very high degree of accuracy

Application range: VAG group vehicles with diesel engines, in particular Volkswagen T2, T3, T4, LT, Golf, Passat, Audi with 2.4D 6 cylinder and 2.4 TD 5 cylinder TDI engines, as well as all older diesel engines such as 1.6 D and 1.7 D GTD (engine code: CS, CW, JD, JX, JP, JR, 1X, 1Y, 1Z, KY, AAZ, AAT, AEL, AFN, AFF, AHU, AHH, AVG, AAB, AJA, AHY)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



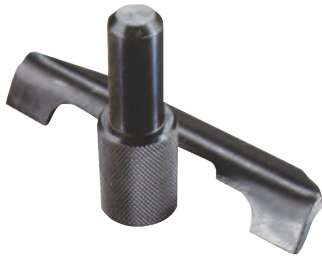
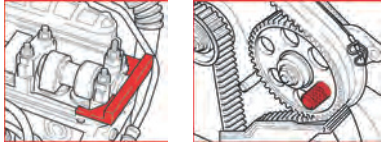
400.9015	VAG	15.4	67.0	126
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VAG / Volvo - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft or cam shaft
- For changing the timing belt
- Very high degree of accuracy

Application range: Audi, Seat, Volkswagen, Volvo vehicles

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



Part No.	Quantity	Description	Weight (g)
400.1725	2 pcs	VAG / Volvo - Engine Timing Tool Set	251

consists of:

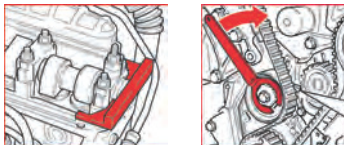
Part No.	Description	Weight (g)
400.9015	Injection pump locking pin Ø 15,4 mm	126
400.9017	Camshaft setting strap	120

VAG - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing belt
- Very high degree of accuracy

Application range: Volkswagen Crafter (2006-2009) with 2.5 TDi engine (engine code: BJJ / BJK / BJL / BJM)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



Part No.	Quantity	Description	Weight (g)
400.0975	5 pcs	VAG - Engine Timing Tool Set	255

consists of:

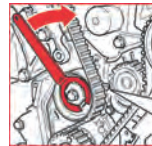
Part No.	Description	Weight (g)
150.3016	Drive pulley wrench, 32, 175mm	110
400.0258	Shim tool (2)	3
400.0978	Crankshaft timing pin	103
400.9017	Camshaft setting strap	120

VAG Drive pulley wrench 32.0 mm

- For the professional engine repair
- Open 12-point
- For tightening and loosening the automatic timing belt pulley
- With plastic-coated handle
- With suspension hole
- Special steel
- Very high degree of accuracy

Application range: Audi 100, A4, A6 TDI 5 cylinder engines, Volkswagen Polo / Lupo from 1999 onwards, LT 2.5 TDI

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



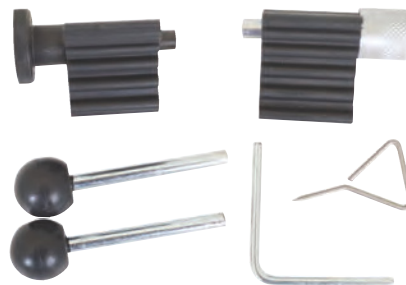
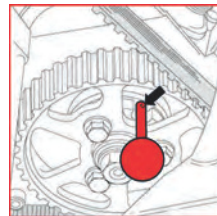
Suitable for	mm	L mm	Thickness mm	Weight (g)	
150.3016	VAG	32,0	175,0	3,0	110

VAG - Engine Timing Tool Set

- For the professional engine repair
- For TDI pump injection engines
- For changing the timing belt
- Secure hold for changing the timing belt or engine repairs

Application range: universal usage for many VAG group vehicles, in particular Audi A3, A4, A6, Škoda Octavia 2, Fabia, Volkswagen Golf, Golf Plus, Jetta, Touran, Lupo, Fox, Bora, Beetle, Caddy, Sharan, Passat, Seat Leon, Toldeo, Althea, Alhambra with 1.4 / 1.9 / 2.0 TDi engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



Part No.	Quantity	Description	Weight (g)
400.2700	7 pcs	VAG - Engine Timing Tool Set	455

consists of:

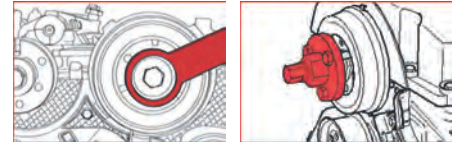
Part No.	Description	Weight (g)
400.0615	Crankshaft pulley setting tool	190
400.0901	Tensioning locking pin	4
400.1415	Crankshaft pulley setting tool	192
400.1425	Tensioning locking pin	11
400.9018	Injection pump locking pin Ø 6,0 mm	20

VAG Camshaft hub removal tool set

- For the professional engine repair
- Suitable for the simple and correct removal of the cam shaft hub
- Counter hold wrench allows for a precise release or tightening of the cam shaft hub securing screw
- Special steel
- Very high degree of accuracy

Application range: Audi, Seat, Škoda and Volkswagen with 1.6 TDI and 2.0 TDI engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



Part No.	Quantity	Description	Weight (g)
400.2110	2 pcs	VAG Camshaft hub removal tool set	760

consists of:

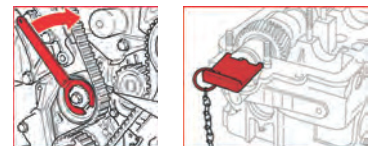
Part No.	Description	Weight (g)
400.2104	Sprocket holding tool	179
400.2105	Cam sprocket hub puller	581

VAG - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft or cam shaft
- For changing the timing belt
- Very high degree of accuracy

Application range: Audi A4, A6, A8 with 2.5 TDI engines, Volkswagen Passat, Sharan with 2.5 TDI engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



Part No.	Quantity	Description	Weight (g)
400.1550	5 pcs	VAG - Engine Timing Tool Set	560

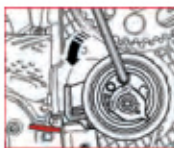
consists of:

Part No.	Description	Weight (g)
X		
150.3012	2 VAG front mask push back	170
400.0159	1 Crankshaft timing pin	120
400.0160	1 Camshaft timing tool (2)	118

VAG small tension plate for arresting the automatic pulley

- For the professional engine repair
- Especially designed for fixing the hydraulic timing belt spanner
- Secure hold for changing the timing belt or engine repairs
- Very high degree of accuracy

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



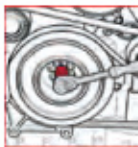
400.9019	VAG small tension plate for arresting the automatic pulley	20
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VAG Crankshaft pulley bolt adaptor

- For the professional engine repair
- For turning the crank shaft on VAG engines
- Required for adjusting and turning the crank shaft when working on engine timing
- Can also be used as a counter holder
- Includes centring pin
- Burnished
- Very high degree of accuracy

Application range: Audi A4, A6, A8, Q7, 6 and 8 cylinder 2.4 and 3.2 L FSI as well as 6 and 8 cylinder TDI Common Rail

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



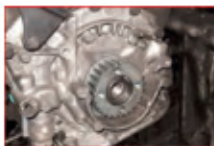
400.9043	VAG Crankshaft pulley bolt adaptor	140
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VAG crank shaft timing belt puller

- For the professional engine repair
- For damage-free removal of crank shaft timing belt wheels
- Less space requirement through compact method of building
- Suited for work on engines in the vehicle or removed
- Special steel
- Very high degree of accuracy

Application range: Audi and Volkswagen with 4 and 5 cylinder engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



Substit for	Ø mm	Height mm	Weight
150.3154	VAG	65,0	75,0 440

VAG Camshaft setting bracket

- For the professional engine repair
- For locking the cam shafts
- Allows for correct engine adjustment
- With central centring screw
- Removal of the valve cover and seal no longer required
- Very high degree of accuracy

Application range: Audi A4, Volkswagen Golf, Bora, New Beetle, Seat Ibiza, Cordoba, Alhambra, Inca, Škoda Octavia with 1.9 SDI or TDI engines (engine code: AHF, ALH, ASY, ASV, AGP, AGR, AQM, AHR, AYQ)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.9044	VAG Camshaft setting bracket	309
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VAG Crank and camshaft locking tool set

- For the professional engine repair
- For TDI pump injection engines
- For changing the timing belt
- Secure hold for changing the timing belt or during engine repairs
- Special plastic
- Very high degree of accuracy

Application range: Volkswagen Golf, Passat, Lupo / Audi A2 and A3 from 2000 onwards

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



150.3066	2 pcs	VAG Crank and camshaft locking tool set	370
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VAG Camshaft locking device

- For the professional engine repair
- For locking both cam shaft wheels (TDC setting)
- Secure hold thanks to optimal positioning
- Very high degree of accuracy

Application range: VAG 1.4 / 1.6 L petrol engines - Volkswagen Lupo, Polo, Golf IV, Bora, Audi A2, Seat, Skoda etc.

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



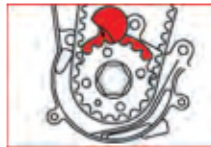
150.3034	VAG Camshaft locking device	370
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VAG Crank shaft locking device

- For the professional engine repair
- For locking the oval crank shaft timing belt wheel
- Secure hold thanks to optimal positioning
- Very high degree of accuracy

Application range: VAG 4 cylinder diesel / Pump injection engines from 2005 onwards and VAG 2.0 I Common Rail diesel engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



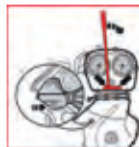
150.3067	VAG Crank shaft locking device	60
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VAG timing chain tensioning wrench

- For the professional engine repair
- For adjusting the timing chain tension
- For putting on the chain tensioner
- Very high degree of accuracy

Application: VAG Group vehicles with 4 valve engines 1.8 and 2.0 TFSI 4 cylinder from the 3rd generation (engine code: CCZA, CCZB, CCZC, CCZD, CDAA, CCAB)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de

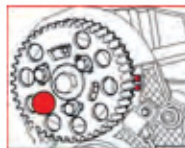


400.4350	VAG timing chain tensioning wrench	562
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VAG Injection pump locking pin

- For the professional engine repair
- Ideally suited to securing the injection pump
- With air inlet
- Simple handling
- Special steel
- Very high degree of accuracy

Application range: Volkswagen Lupo 3L, 1.2/1.4 TDi, Polo 1.4 TDi, Golf / Bora 1.9 SDi / TDi, Passat 1.9 TD (1994-1996), Beetle 1.9 TDi (>1999) and Transporter 1.9TD



Substit for	Ø mm	L mm	Weight
400.9018	VAG	6,0	80,0 20

VAG Camshaft adjustment plate

- For the professional engine repair
- Device for a secure hold to change the timing belt
- For locking the cam shaft
- Secure hold thanks to optimal positioning
- Very high degree of accuracy

Application: VAG chain-driven Group vehicles with 2.3 / 2.8 and 2.9 engines, in particular Volkswagen Golf, Bora, Vento, Corrado, Passat, Sharon, Transporter, Seat Toledo

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



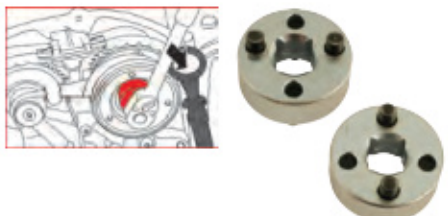
400.9040	VAG Camshaft adjustment plate	57
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VAG 4/3 way cam shaft adjustment tool

- For the professional engine repair
- For the installation and removal of the central cam shaft adjustment
- Saves removing the timing chain or removing the engine
- Very high degree of accuracy
- Serviceable from both sides

Application range: VAG Group vehicles 1.8 and 2.0 litre TFSI / TSI engines with timing chains (engine codes: BYT / BZB / CABA / CABB / CABD / CAWB / CBFA / CCTA / CCZA / CCZB / CCZC / CDA A / CDHA / CDHB / CDNB / CDNC / CDND / CFKA / CGYA / CCZA / CCZB / CCZD / CDA A / CDABBYT / BZB / CABA / CABB / CABD / CAWB / CBFA / CCTA / CCZA / CCZB / CCZC / CDA A / CDHA / CDHB / CDNB / CDNC / CDND / CFKA / CGYA / CCZA / CCZB / CCZD / CDA A / CDABBYT)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



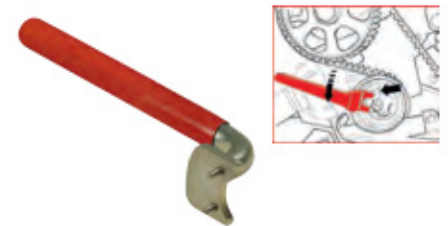
400.9094	VAG 4/3 way cam shaft adjustment tool	63
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VAG automatic pulley wrench for pin-type face

- For tightening and relaxing the timing belt on VAG vehicles
- For pin spacers with driver bores (pin-type face)
- Cranked shape
- With plastic-coated handle

Application range: Audi, Volkswagen, Seat, Škoda 4 and 5 cylinder TDI engines, also Volkswagen T4 power steering pumps

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



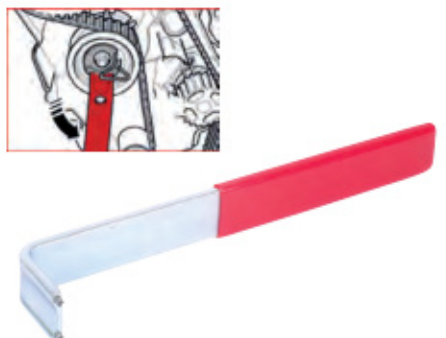
	Suitable for	L mm	U
400.9008	VAG	140.0	206
400.9009	VAG	210.0	263

VAG automatic pulley wrench for pin-type face

- For the professional engine repair
- For tightening and relaxing the timing belt on VAG vehicles
- For pin spacers with driver bores (pin-type face)
- Angled shape
- With plastic-coated handle
- Very high degree of accuracy

Application range: Audi, Volkswagen, Seat, Škoda 4 and 5 cylinder TDI engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



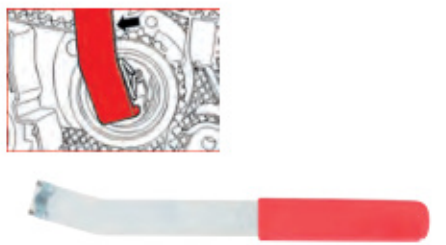
400.9010	VAG automatic pulley wrench for pin-type face	230
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VAG automatic pulley wrench for pin-type face

- For tightening and relaxing the timing belt on VAG vehicles
- For pin spacers with driver bores (pin-type face)
- 15° angled
- With plastic-coated handle

Application range: Audi, Volkswagen, Seat, Škoda 2.0 FSI/ TDI engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



	Suitable for	Pin key size	Stud offset	U
400.9011	VAG	18.0	3.0	259

VAG Pin wrench 3 mm, adjustable

- Universal usage
- For the actuation of belt tensioners in VAG
- Phosphate
- Special steel

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



	Suitable for	Ø mm	L mm	U
150.3018	VAG	9.0-45.0	150.0	100

VAG automatic pulley wrench for pin-type face

- For tightening and relaxing the timing belt on VAG vehicles
- 180° adjustable handle
- For pin spacers with tappet tolerances
- Normal and extra fl t ideal for hard to access areas
- With plastic coated handle

Application range: VAG 4 and 5 cylinder TDI-Model, T4 Servo pump



	Suitable for	L mm	Stud offset	Pin key size	U
500.4315	VAG	180.0	3.0	18.0	95
150.3017	VAG	185.0	3.0	18.0	105

VAG automatic pulley wrench set for 2.0 RDI PD engines

- Suitable for the assembly and disassembly of the timing belt
- For hard-to-reach places due to the modified support frame screws
- Chrome vanadium

Application range: Audi A3 2.0 TDI PD DPHC (05-08) with the engine ID codes AZU, BKD, BHN, BUY and Volkswagen Caddy, Caddy Maxi 2.0 SDI (09-) with BDJ, BST with engines with hydraulic spanners and Transporter 1.9 TDI Pd (08-09)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2150	3 pcs	VAG automatic pulley wrench set for 2.0 RDI PD engines	160
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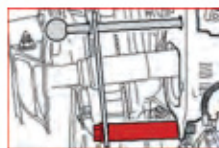
consists of:

			U
400.2151	Tensioner adjuster	Ø 6.0 mm	20
400.2152	Tensioner adjuster	Ø 3.9 mm	70
400.2153	Tensioner adjuster	Ø 2.5 mm	70

VAG front mask stub rod

- For moving the front mask (radiator support) forward in order to carry out service work
- Allows for timing belt changes or the renewal of the water pump
- Removes the need for the adjustment of the bonnet lock and the gap measurements

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de

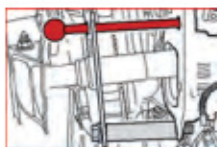


Substitutable for	Part No.	L mm	Content	Weight
150.3012	VAG	M8	100.0	1 170

VAG front mask guiding rods

- For moving the front mask (radiator support) forward in order to carry out service work
- Allows for timing belt changes or the renewal of the water pump
- Removes the need for the adjustment of the bonnet lock and the gap measurements

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



Substitutable for	Part No.	L mm	Content	Weight
400.2077	VAG	M8	180.0	1 80
400.2078	VAG	M10	180.0	1 120

VAG front mask guiding and stub rods set

- For moving the front mask (radiator support) forward in order to carry out service work
- Allows for timing belt changes or the renewal of the water pump
- Removes the need for the adjustment of the bonnet lock and the gap measurements

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



Substitutable for	Part No.	L mm	Content	Weight
400.2075	6 pcs	VAG front mask guiding and stub rods set		749

consists of:

X	Part No.	L mm	Content	Weight
150.3012	2	VAG front mask push back		170
400.2077	1	Front mask removal aid (2)		80
400.2078	1	VAG front mask removal aid (2)		120

VAG V belt and timing belt wrench

- For loosening the automatic clamping device
- Problem free changing of the belt
- For hard to reach places
- With plastic-coated handle
- Chrome vanadium

Application range: Audi, Seat, Škoda and Volkswagen with 2.0 TDI and 1.4 TSI engines
Volkswagen Beetle (2011-2013), Eos (2007-2013), Golf (2003-2008), Golf (>2008), Golf Estate (2007-2009), Golf Estate (>2009), Gold Plus (2005-2009), Golf Plus (>2009), Golf VI Cabrio (>2011), Jetta (2005-2011), Jetta (>2011), Scirocco (>2008), Passat (2005-2011), Passat (>2011), Tiguan (2010-2013), Polo (>2009), Touran (2007-2013), **Audi** A1 (2010-2013), **Škoda** Octavia (>2004), Yeti (2010-2013), engine code: CAVD, CAXA, CAVB, CAVC



Substitutable for	Part No.	Length mm	Weight
400.4300	VAG	16	390.0 501

VAG Engine support socket set, extra short

- 12-point
- For the assembly and removal of the aluminium engine support (hard to reach sites)
- Ideal for timing belt change
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Extra-short design
- For manual operation
- Matt finish
- Chrome vanadium

Application range: For timing belt change on Volkswagen Golf IV, Audi, Škoda, Seat etc.



Substitutable for	Part No.	Length mm	Weight
911.1295	2 pcs	VAG Engine support socket set, extra short	110

consists of:

Part No.	Description	Weight
911.1293	12 point socket, 16.0 mm short	40
911.1294	12 point socket, 16.0 mm long	67

Hexagon socket, long for pulley wheel

- Suited for the assembly and disassembly of the pulley wheel vibration damper, e.g. when changing the timing belt
- 6-point
- Flank Traction-Profile
- In accordance with DIN 3124 / ISO 2725
- Internal square to DIN 3120 / ISO 1174 with ball reception
- Long design
- For manual operation
- Matt finish
- Chrome vanadium

Application range: Audi, Seat, Škoda and Volkswagen

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



Part No.	D1 mm	D2 mm	L mm	T mm	Weight
917.1254	27.0	34.0	36.0	76.0	19.0 280

Bit socket for spline (XZN®) screws, long

- Ideal for releasing and tightening of the securing screws of the high-pressure pumps, timing belt wheels, e.g. when changing timing belt
- Spline (XZN®)
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Long design
- With press fitted nickel plated insert bit
- For manual operation
- Matt finish
- Chrome vanadium

Application range: Audi, Seat, Škoda and Volkswagen with TDI Common Rail engines, engine code: CAAA, CAAB, CAAC, CAYB, CBAA, CBAB, CBBB etc.

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



Substitutable for	D mm	L mm	T mm	Weight
911.1353	M10	22.0	110.0	72.0 112

VAG Bit socket for hexagon screws, extra long

- Hexagon socket with ball head
- For releasing and tightening the TDC sensor
- Internal square drive to DIN 3120 / ISO 1174 with ball reception
- Extra-long design
- For manual operation
- Matt finish
- Chrome vanadium

Application range: VAG models from 2005, 4-cylinder 2.0l diesel engines



Substitutable for	D mm	L mm	Weight
911.1598	4.0	11.0	300.0 80

Impact bit socket for spline (XZN®) screws, long

- Ideally suited to releasing and tightening the securing screws on the cam shaft wheel
- Spline (XZN®)
- Internal square in accordance with DIN 3121 / ISO 1174
- Long design
- For machinery usage
- Phosphate
- Chrome molybdenum

Application range: Volkswagen Transporter >2004 with 2.5 TDI engines and Touareg >2003 with 2.5 TDI engines, engine code: AXD, BNZ, BAC and BPE

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



Substitutable for	L mm	D mm	T mm	Weight
911.0953	M16	75.0	25.0	45.0 150

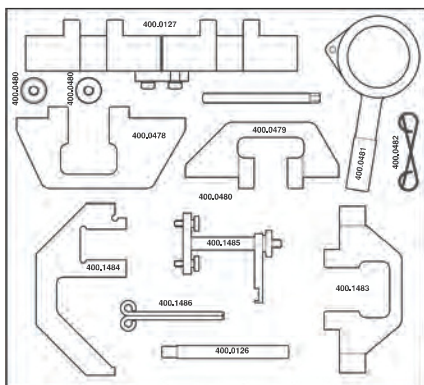
BMW

BMW - Engine Timing Tool Set

- For the professional engine repair
- Especially for chain-driven engines
- Very high degree of accuracy
- In durable steel storage case

Application range: BMW 3, 5, 7, X3, X5, Z3, Z4, 8 (E20, E28, E31, E32, E34, E36, E38, E46, E53, E65, E66, E83, E84) with petrol and diesel engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1475	16 pcs	BMW - Engine Timing Tool Set	5.32

consists of:

X		
400.0126	1	Crankshaft TDC locking pin
400.0127	1	Camshaft locking tool exhaust (2)
400.0478	1	Camshaft locking tool
400.0479	1	Camshaft locking tool
400.0480	1	Primary timing chain pre-load pin (3)
400.0481	1	VANOS unit engagement wrench

consists of:

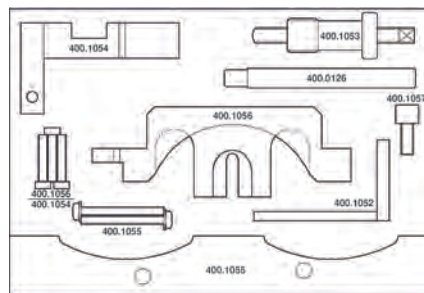
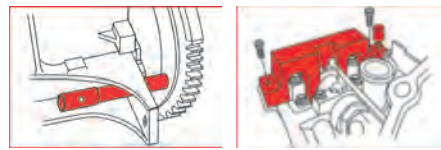
X		
400.0482	2	Tensioner locking pin set
400.1483	1	Camshaft locking tool
400.1484	1	Camshaft locking tool
400.1485	1	Locking clamp for camshaft alignment tools
400.1486	1	Tensioner locking pin (2)

BMW - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: BMW (E46) 316, 316ti Compact (engine code: N42 B18A / N46 B18), (E46) 318i, 318ti Compact (engine code: M42 B20A / N46 B18 / N46 B20), (E81/82/87) 118i, 120i (engine code: N46 B20B / N46T B20), (E90/91/92/93) 318i, 320i. (engine code: N46 B18B / N46 B20B), (E85) Z4 2.0 (engine code: N46 B20), (E83) X3 2.0 (engine code: N46 B20B)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1050	10 pcs	BMW - Engine Timing Tool Set	2.10

consists of:

X		
400.0126	1	Crankshaft TDC locking pin
400.1052	1	Flywheel TDC locking pin
400.1053	1	Timing chain pre-tensioning tool
400.1054	1	Camshaft alignment tool (inlet)
400.1055	1	Sensor gear alignment tool
400.1056	1	Camshaft alignment tool exhaust (4)
400.1057	1	Camshaft alignment tool bolt: M8 x 25 nm

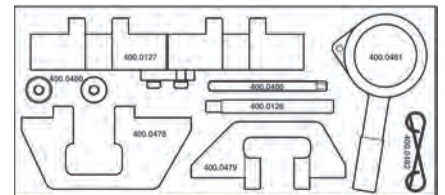
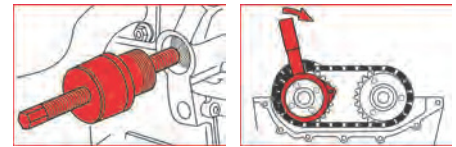


BMW - Engine Timing Tool Set

- For the professional engine repair
- Especially for chain-driven vehicles
- For locking the crank shaft or cam shaft
- Ideal for the installation and removal of the VANOS unit
- Suitable for tensioning the chain
- Very high degree of accuracy
- In durable steel storage case

Application range: for all BMW vehicles with petrol engines (engine code: M42 / M43 / M50 / M52 / M60) and diesel engines (engine code: M51). Contains a special wrench for controlling the turn of the exhaust cam shaft pinion when removing and installing the VANOS unit. There is also a tensioning tool included for tensioning the timing chain

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0475	11 pcs	BMW - Engine Timing Tool Set	4.08

consists of:

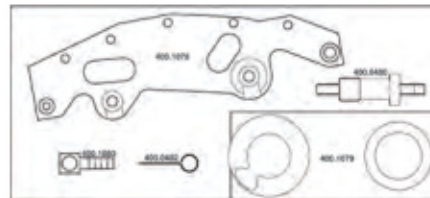
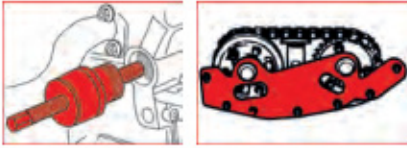
X		
400.0126	1	Crankshaft TDC locking pin
400.0127	1	Camshaft locking tool exhaust (2)
400.0478	1	Camshaft locking tool
400.0479	1	Camshaft locking tool
400.0480	1	Primary timing chain pre-load pin (3)
400.0481	1	VANOS unit engagement wrench
400.0482	2	Tensioner locking pin set

BMW - Engine Timing Tool Set

- For the professional engine repair
- Expansion set for use in connection with 400.0125
- For changing the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: BMW 528i, X5, E46, Z3, Z4, 325, 525 (engine code: M52 / M54 / M56 / 22 6S1 / 25 6S5 / 30 6S3). Contains a setting gauge from the double VANOS

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1075	7 pcs	BMW - Engine Timing Tool Set	3.56

consists of:

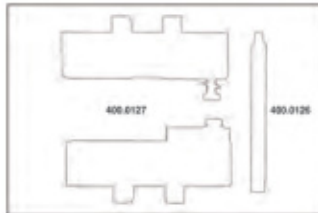
	X		
400.0480	1	Primary timing chain pre-load pin (3)	112
400.0482	1	Tensioner locking pin set	3
400.1078	1	Camshaft timing setting tool VANOS	972
400.1079	1	Flywheel sprocket alignment tool	806
400.1080	1	Pneumatic connector	37

BMW - Engine Timing Tool Set

- For the professional engine repair
- Especially for chain-driven vehicles
- For locking twin-cam, dual cam shaft
- Very high degree of accuracy
- In durable steel storage case

Application range: for all BMW vehicles with petrol engines (engine code: M42 / M43 / M50 / M52 / M60) and diesel engines (engine code: M51)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0125	3 pcs	BMW - Engine Timing Tool Set	2.66

consists of:

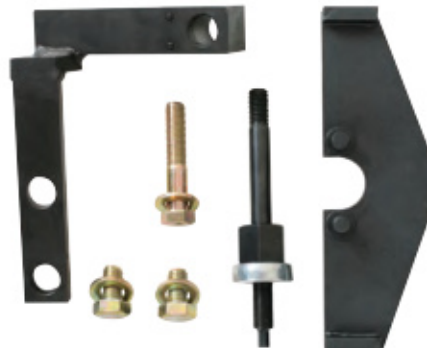
400.0126		Crankshaft TDC locking pin	109
400.0127		Camshaft locking tool exhaust (2)	900

BMW / Mini - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy

Application range: BMW Mini (2001-2006) (engine code: W10B16AA/BA)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.9090	7 pcs	BMW / Mini - Engine Timing Tool Set	1.93

consists of:

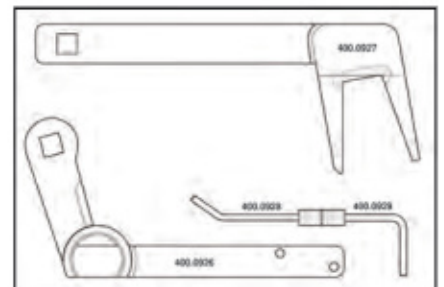
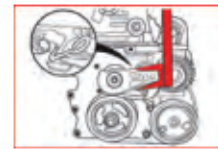
400.9091		Camshaft locking tool	575
400.9092		Engine support bracket (4)	615
400.9093		Timing chain pre-tensioning tool	215

BMW / Mini - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: BMW Mini One, Cooper, Cooper S with 1.6 petrol engines (engine code: W10B16AA / W10B16BA / W11B16AA)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0925	4 pcs	BMW / Mini - Engine Timing Tool Set	2.02

consists of:

400.0926		Serpentine belt tensioner	441
400.0927		Camshaft pulley loosening tools	421
400.0928		Tensioning locking pin	19
400.0929		Locking pin	20



BMW crank shaft locking tool set

- For the professional engine repair
- For fixing the crank shaft
- Secure fit
- Very high degree of accuracy

Application range: BMW E81/E82/E87/E88/E46/E60/E61/E83/E90/E91/E92/E93/E65/E66/E53/E70/E71/E72 (engine code: 20 4D 4, 30 6D 2, 30 6D 3, 30 6D 4, 30 6D 5)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



			ID
400.2375	2 pcs	BMW crank shaft locking tool set	127

consists of:

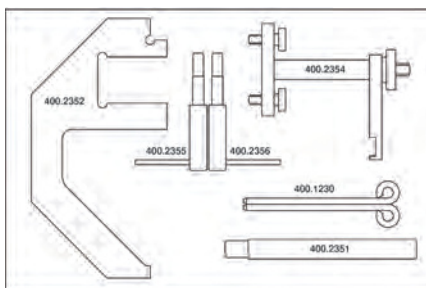
			ID
400.2376		Crankshaft timing tool	52
400.2377		Crankshaft timing tool	55

BMW / Land Rover / Rover - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft or cam shaft
- For changing the timing belt or the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: BMW 1, 3, 5, X3, Land Rover Freelander, Rover 75 (engine code: M47)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



			ID
400.2350	7 pcs	BMW / Land Rover / Rover - Engine Timing Tool Set	1.03

consists of:

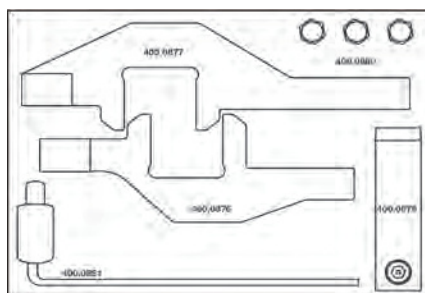
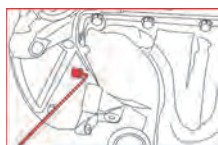
			ID
400.1230		Tensioning locking pin (2)	14
400.2351		Crankshaft TDC locking pin	108
400.2352		Camshaft locking tool	461
400.2354		Camshaft locking holding tool	240
400.2355		Crankshaft timing tool	52
400.2356		Crankshaft timing tool	55

BMW / Mini / PSA - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: BMW Mini with 1.6 engines (engine code: N14 / R56), Peugeot 207, 308 with 1.6 engines (engine code: EP6 / EP6DT / DTS), Citroën with 1.6 engines (engine code: EP6 / EP6DT / DTS)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



			ID
400.0875	7 pcs	BMW / Mini / PSA - Engine Timing Tool Set	1.49

consists of:

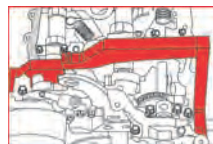
			ID
400.0851		Crankshaft timing pin	52
400.0876		Camshaft alignment tool (inlet)	270
400.0877		Camshaft alignment tool (exhaust)	423
400.0878		Support clamp	93
400.0880		Screw M6 x 30,0 mm (3)	7

BMW / Mini / PSA - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy

Application range: BMW Mini with 1.4 / 1.6 Valvetronic engines (engine code: N12), Peugeot 207, 308 with 1.4 / 1.6 engines (engine code: EP3 / EP6), Citroën with 1.4 / 1.6 engines (engine code: EP3 / EP6)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



			ID
400.0850	7 pcs	BMW / Mini / PSA - Engine Timing Tool Set	1.40

consists of:

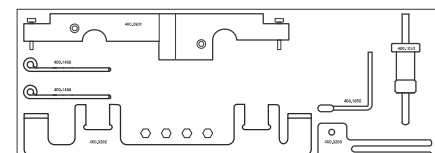
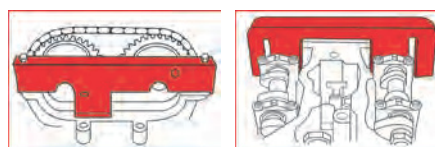
			ID
400.0851	1	Crankshaft timing pin	52
400.0852	1	Camshaft locking tool inlet (2)	812
400.0853	1	Camshaft locking tool (EX)	358
400.0854	3	Screw M6 x 30,0 mm	9

BMW - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: BMW with 1.6 / 2.0 engines (>2006) (engine codes: N43 / B126A/AA / B16AA / B20KO / B20AY / B20A / B16AA/OO / B20AY / B20UO / B20A / B20A/AA)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



			ID
400.3200	7 pcs	BMW - Engine Timing Tool Set	3.09

consists of:

400.1052	Flywheel TDC locking pin Ø 8 mm	20	
400.3203	Balance shaft locking tool	100	
400.3202	Camshaft alignment tool 268 mm	683	
400.3201	VANOS Sensor alignment tool	457	
400.1053	Timing chain pre-tensioning tool Ø 10 mm x 21 mm, 130 mm	219	
400.1486	Tensioner locking pin (2)	29	

BMW / Mini - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy

Application range: BMW Mini with 16V engines (engine code: W16D)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2475	8 pcs BMW / Mini - Engine Timing Tool Set	126	

consists of:

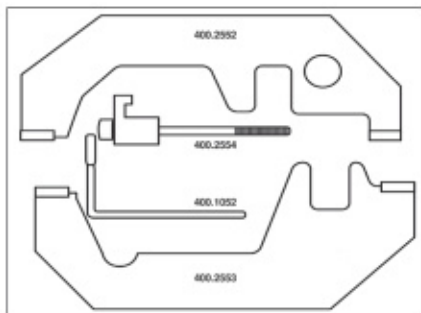
	X		
400.0165	2	Camshaft locking pin 5.0 mm	19
400.0580	1	Crankshaft locking pin Ø 8,0 mm, 70 mm	30
400.2476	1	Flywheel locking pin, BMW-Mini (5)	40

BMW - Engine Timing Tool Set

- For the professional engine repair
- For chain-driven engines
- Very high degree of accuracy
- In durable steel storage case

Application range: BMW 5, 6, 7, X5 (engine code: N62 / N73)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2550	4 pcs BMW - Engine Timing Tool Set	2.74	

consists of:

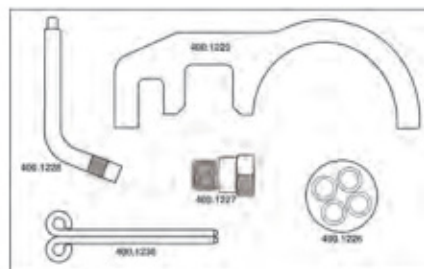
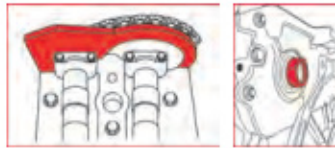
400.1052	Flywheel TDC locking pin	20	
400.2552	Camshaft setting tool (inlet)	698	
400.2553	Camshaft setting tool (exhaust)	783	
400.2554	Holding screw	105	

BMW / Mini - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: BMW with 2.0 engines (2007-2010) (engine codes: N47 / N47S), BMW Mini Countryman, Clubman (>2007) (engine code: R55 / R56 / R57 / R60). Contains pumps / pulley wheels disassembly tool

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1225	6 pcs BMW / Mini - Engine Timing Tool Set	1.91	

consists of:

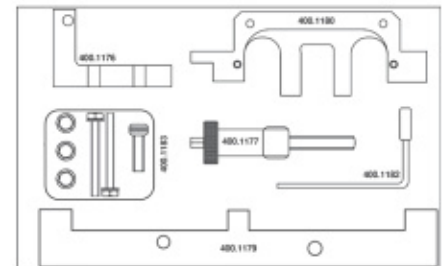
400.1226	Crankshaft pulley turning tool	183	
400.1227	High pressure pump sprocket removal tool	89	
400.1228	Flywheel plate timing pin	109	
400.1229	Camshaft alignment tool	242	
400.1230	Tensioning locking pin (2)	14	

BMW - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: BMW (E81/E87) 116i 316i, (E46/E40) 316Ci, (E46) 316Ti with 1.6 engines (engine code: N40 / N45 / N45T)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1175	8 pcs BMW - Engine Timing Tool Set	2.70	

consists of:

400.1176	Camshaft locking tool (inlet)	278	
400.1177	Timing chain pre-tensioning tool	55	
400.1179	VANOS sensor setting tool	301	
400.1180	Camshaft alignment tool (exhaust)	671	
400.1182	Flywheel locking pin	20	
400.1183	Locking screw (3)	140	

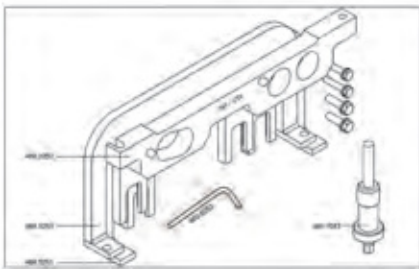


BMW - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: BMW 323i, 325i, 523i, Z4, X3, 130i, 330i, 530i, 630i, 730i, 528i, X1, 125i, 525i, 740i, X6, 135i, 335i, 3.0 M Coupe with 2.3 / 2.8 / 3.0 / 3.5 / 4.0 engines (engine code: N52 B25A / N52 B25AE / N52 B25AF / N52 B25BE / N52 B25O1 / N52 B25O2 / N52 B30A / N52 B30AF / N52 B30O2 / N52 B30U1 / N52K B25A/O1 / N52K B25AE / N52K B25U1 / N52K B30A / N52K / B30A/O1 / N52K B30AE / N52K B30AF / N53 B25A / N53 B30A / N53 B30A/O0 / N53 B30UO / N54 B30A / N54 B30A/AA / N54 B30A/TO / N54 B30TO)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.3250	5 pcs	BMW - Engine Timing Tool Set	5.40
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consists of:

400.0253	Locking pin Ø 8.0 mm	41
400.1053	Timing chain pre-tensioning tool	219
400.3251	Camshaft alignment tool	1396
400.3252	Camshaft VANOS sensor alignment tool	527
400.3254	Camshaft alignment tool	1518

BMW Vibration damper holding screw set

- For clamping the crank shaft when loosening and tightening the crankshaft central screw
- Prevents slipping whilst holding
- With replaceable and tight-fit guide sleeves (Ø 57.0 / 59.5 / 60.5 mm)
- Minimal force required thanks to extra-long lever
- Matt finish
- Chrome vanadium

Application range: When working on the timing drive of BMW M47 TU / TU2 engines with old and new vibration damper design



911.1720	5 pcs	BMW Vibration damper holding screw set	4.60
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consists of:

911.1721	Extension pipe, 1000 mm	1900
911.1722	Vibration damper holding wrench insert, 22,0 mm	1400
911.1723	Guide sleeve, Ø 57.0 mm	380
911.1724	Guide sleeve, Ø 59.5 mm	440
911.1725	Guide sleeve, Ø 60.5 mm	480

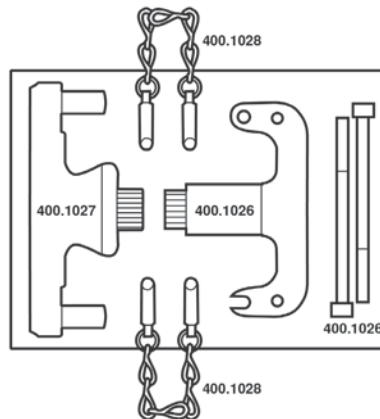
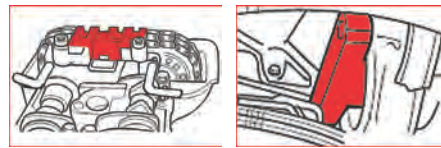
CHRYSLER

Chrysler / Mercedes - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: Mercedes vehicles with 2.2 / 2.7 CRD engines, Chrysler PT Cruiser with 2.2 CRD engines, Jeep Grand Cherokee with 2.7 CRD engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1025	6 pcs	Chrysler / Mercedes - Engine Timing Tool Set	1.46
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consists of:

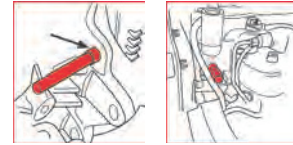
400.1026	Flywheel locking tool (3)	197
400.1027	Flywheel locking tool	436
400.1028	Camshaft locking tool (2)	36

Chrysler - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- Very high degree of accuracy

Application range: Chrysler Voyager, Grand Voyager with 2.5 CRD Common-Rail Diesel engines (engine code: R2516C / R2516J)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2450	7 pcs	Chrysler - Engine Timing Tool Set	514
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consists of:

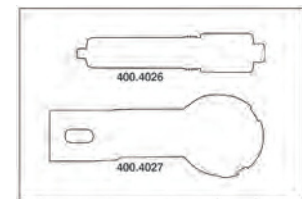
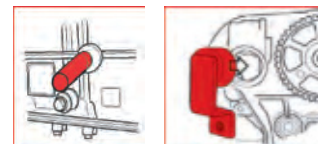
400.2451	Flywheel locking pin	35
400.2452	Flywheel locking pin	420
400.2453	Camshaft locking pin (inlet)	89
400.2454	Camshaft locking pin (exhaust)	30
400.2455	Camshaft belt holding tool	7
400.9008	Automatic pulley wrench for pin-type face	206

Chrysler - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft and cam shaft
- For changing the timing belt
- Very high degree of accuracy

Application range: Jeep Cherokee (2008-2011) with 2.8 CRD (engine code: ENS(51C), Chrysler Grand Voyager (2008-2011) (engine code: VM64C)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.4025	2 pcs	Chrysler - Engine Timing Tool Set	500
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consists of:

400.4026	Crankshaft locking tool	160
400.4027	Camshaft locking tool	340

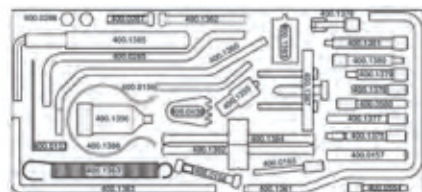
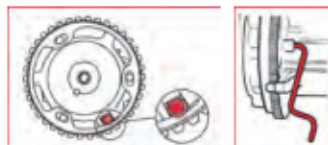
CITROËN

PSA - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Citroën, Peugeot vehicles with HPI and HDi engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



			👤
400.1650	34 pcs	PSA - Engine Timing Tool Set	2.17

consists of:

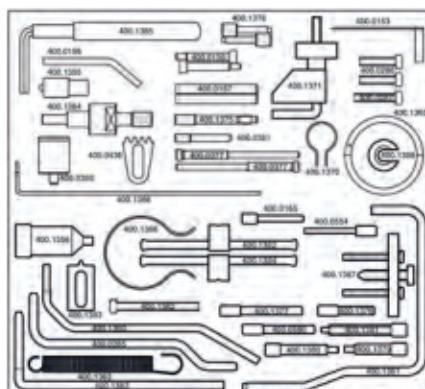
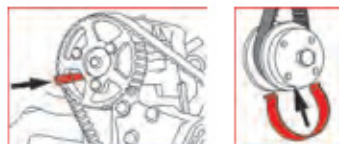
			👤
400.0153	1	Tensioner adjuster, square 8.0 mm	6
400.0156	1	Crankshaft timing pin Ø 6.0 mm	23
400.0157	1	Crankshaft locking pin Ø 6.0 mm, short (2)	101
400.0158	1	Crankshaft locking pin (2)	30
400.0165	1	Camshaft locking pin 5.0 mm	19
400.0285	1	Crankshaft locking pin Ø 8.0 mm	97
400.0286	1	Screw M8 x 35 mm (2)	16
400.0436	1	Flywheel locking tool	135
400.0554	1	Locking pin Ø 6.0 mm	19
400.0580	1	Crankshaft locking pin Ø 8.0 mm	30
400.1355	1	Flywheel locking pin	80
400.1356	1	Flywheel locking tool	252
400.1360	1	Flywheel locking tool	82
400.1361	1	Flywheel locking tool	146
400.1362	1	Locking screw M8 x 70.0 mm	31
400.1363	1	Flywheel locking pin with spring	126
400.1375	1	Injection pump timing pin, M8	32
400.1376	1	Camshaft locking pin	24
400.1377	1	Tensioning locking pin	35
400.1378	1	Camshaft locking pin (2)	21
400.1379	1	Camshaft locking pin	37
400.1380	1	Camshaft locking pin	43
400.1381	1	Camshaft locking pin (VTC)	50
400.1382	1	Tensioner adjuster	115
400.1383	1	Flywheel locking tool	30
400.1384	1	Tensioner adjuster	118
400.1385	1	Tensioner adjuster, hex Ø 8.0 mm	177
400.1386	1	Belt retaining tool	50
400.1387	1	Crankshaft pulley remover	153

PSA - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: PSA vehicles including 2nd generation with EW 16V and 2.5 / 2.7 / 2.8 diesel engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



			👤
400.1350	45 pcs	PSA - Engine Timing Tool Set	5.93

consists of:

			👤
400.0153	1	Tensioner adjuster, square 8.0 mm	6
400.0156	1	Crankshaft timing pin Ø 6.0 mm	23
400.0157	1	Crankshaft locking pin Ø 6.0 mm, short (2)	101
400.0158	1	Crankshaft locking pin (2)	30
400.0165	2	Camshaft locking pin 5.0 mm	19
400.0285	1	Crankshaft locking pin Ø 8.0 mm	97
400.0286	1	Screw M8 x 35 mm (2)	16
400.0287	1	Screw M8 x 40.0 mm	18
400.0377	1	Camshaft sprocket locking pin (2)	68
400.0380	1	Flywheel locking tool	222
400.0381	1	Coolant Pump tensioning locking pin	30
400.0436	1	Flywheel locking tool	135
400.0554	1	Locking pin Ø 6.0 mm	19
400.0580	1	Crankshaft locking pin Ø 8.0 mm	30
400.1355	1	Flywheel locking pin	80

consists of:

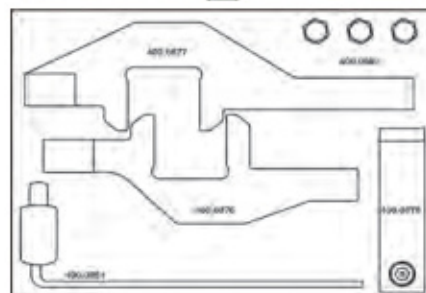
			👤
x			
400.1356	1	Flywheel locking tool	252
400.1360	1	Flywheel locking tool	82
400.1361	1	Flywheel locking tool	146
400.1362	1	Locking screw M8 x 70.0 mm	31
400.1363	1	Flywheel locking pin with spring	126
400.1364	1	Flywheel locking pin	215
400.1365	1	Tensioner pulley adjusting tool	330
400.1366	1	Tensioner adjuster, square, 6.0 mm	44
400.1370	1	Crankshaft sprocket centraliser	2
400.1371	1	Belt retaining tool	99
400.1375	1	Injection pump timing pin, M8	32
400.1376	1	Camshaft locking pin	24
400.1377	1	Tensioning locking pin	35
400.1378	1	Camshaft locking pin (2)	21
400.1379	1	Camshaft locking pin	37
400.1380	1	Camshaft locking pin	43
400.1381	1	Camshaft locking pin (VTC)	50
400.1382	1	Tensioner adjuster	115
400.1383	1	Flywheel locking tool	30
400.1384	1	Tensioner adjuster	118
400.1385	1	Tensioner adjuster, hex Ø 8.0 mm	177
400.1386	1	Belt retaining tool	50
400.1387	1	Crankshaft pulley remover	153
400.1388	1	Tensioner adjuster	41

BMW / Mini / PSA - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: BMW Mini with 1.6 engines (engine code: N14 / R56), Peugeot 207, 308 with 1.6 engines (engine code: EP6 / EP6DT / DTS), Citroën with 1.6 engines (engine code: EP6 / EP6DT / DTS)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



			👤
400.0875	7 pcs	BMW / Mini / PSA - Engine Timing Tool Set	1.49

consists of:

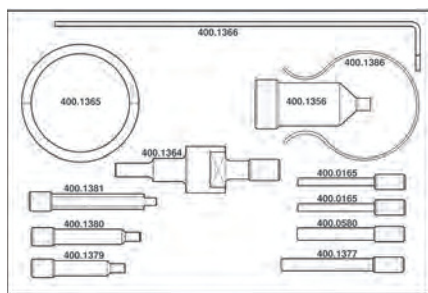
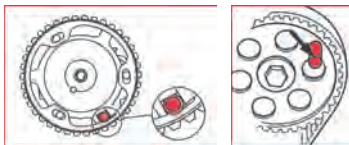
Part No.	Description	Quantity
400.0851	Crankshaft timing pin	52
400.0876	Camshaft alignment tool (inlet)	270
400.0877	Camshaft alignment tool (exhaust)	423
400.0878	Support clamp	93
400.0880	Screw M6 x 30,0 mm (3)	7

PSA - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Citroën Xsara, Picasso, C5, C4, Evasion, Synergie, C8, Jumpy, Dispatch, Peugeot 206, 307, 406, 607, 806, 807, Expert (engine code: EW12J4(3FC) / EW10D-HP1(RLZ) / EW10J4S(RFK) / EW10J4(RFN/RFR) / EW7J4(6FZ)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



Part No.	Description	Quantity
400.1750	12 pcs PSA - Engine Timing Tool Set	1.26

consists of:

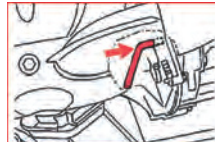
Part No.	Description	Quantity
400.0165	Camshaft locking pin 5,0 mm	19
400.0580	Crankshaft locking pin Ø 8,0 mm	30
400.1356	Flywheel locking tool	252
400.1364	Flywheel locking pin	215
400.1365	Tensioner pulley adjusting tool	330
400.1366	Tensioner adjuster, square, 6,0 mm	44
400.1377	Tensioning locking pin	35
400.1379	Camshaft locking pin	37
400.1380	Camshaft locking pin	43
400.1381	Camshaft locking pin (VTC)	50
400.1386	Belt retaining tool	50

PSA crank shaft locking tool set

- For the professional engine repair
- For fixing the crank shaft
- Contains special square wrench for adjusting the timing belt on the automatic pulley
- For changing the timing belt
- Secure hold for changing the timing belt or engine repairs
- Very high degree of accuracy

Application range: Citroën AX with 1.0/1.1 and 1.4 engines, BX 16, BX 19, BX 16 valve, Peugeot 106, 205, 405 with 1.0/1.1 and 1.4 engines, Peugeot 205, 305, 309, 405 with 1.6 and 1.9 engines, 309 GTI, 405 Mi1,6

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



Part No.	Description	Quantity
400.0200	6 pcs PSA crank shaft locking tool set	235

consists of:

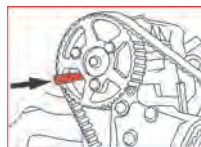
Part No.	Description	Quantity
400.0153	Tensioner adjuster, square 8.0 mm	6
400.0156	Crankshaft timing pin Ø 6,0 mm	23
400.0157	Crankshaft locking pin Ø 6,0 mm, short (2)	101
400.0158	Crankshaft locking pin (2)	30

Fiat / GM / Opel / PSA / Renault - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy

Application range: Fiat, PSA, Renault, Opel vehicles with 2.5 / 2.8D engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



Part No.	Description	Quantity
400.1775	4 pcs Fiat / GM / Opel / PSA / Renault - Engine Timing Tool Set	143

consists of:

Part No.	Description	Quantity
400.0165	Camshaft locking pin 5,0 mm	19
400.0754	Camshaft locking pin	51
400.1388	Tensioner adjuster	41

PSA - Valve spring compressor

- For the professional engine repair
- For retaining the valve springs
- Universal usage
- Includes 8 screws with pressure cone and 2 locking screws
- Chrome vanadium
- Very high degree of accuracy

Application range: Citroën Berlingo, Xsara petrol engines with 1.0, 1.1, 1.4, 1.6L, and Peugeot 106, 205, 206, 306, 307, 405 with petrol engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



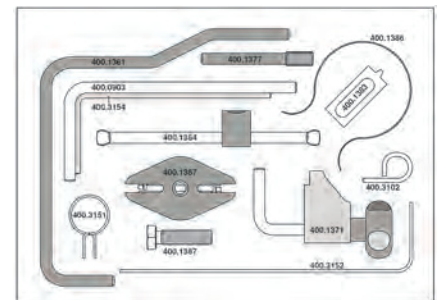
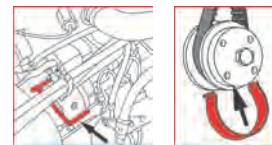
Part No.	Suitable for	Length mm	Quantity
400.9001	PSA	390,0	2,50

Fiat / PSA - Engine Timing Tool Set

- For the professional engine repair
- For adjusting the valve controls
- For twin cam shaft systems with timing belt/chain combinations
- Very high degree of accuracy
- In durable steel storage case

Application range: Citroën and Fiat with 2.0 / 2.2 SOHC and DOHC engines (engine code: DW10 / DW12)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



Part No.	Description	Quantity
400.3150	12 pcs Fiat / PSA - Engine Timing Tool Set	814

consists of:

Part No.	Description	Quantity
400.0903	Crankshaft locking pin	85
400.1361	Flywheel locking tool	146
400.1371	Belt retaining tool	99

consists of:

400.1377	Tensioning locking pin	35
400.1383	Flywheel locking tool	30
400.1384	Tensioner adjuster	118
400.1386	Belt retaining tool	50
400.1387	Crankshaft pulley remover	153
400.3102	Tensioner locking pin	4
400.3151	Crankshaft pulley centralisation tool	2
400.3152	Tensioner locking pin	7
400.3154	Auxiliary drive belt tensioner locking pin Ø 4.0 mm	18

PSA - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft or cam shaft
- For changing the timing belt
- Very high degree of accuracy

Application range: PSA vehicles with 1.4 8V and 16V engines (engine code: KFU)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.3100	9 pcs. PSA - Engine Timing Tool Set	362

consists of:

400.0156	Crankshaft timing pin Ø 6.0 mm	23
400.0157	Crankshaft locking pin Ø 6.0 mm, short (2)	101
400.0165	Camshaft locking pin 5.0 mm	19
400.0580	Crankshaft locking pin Ø 8.0 mm	30
400.1386	Belt retaining tool	50
400.3101	Flywheel locking pin Ø 6.0 mm, long	58
400.3102	Tensioner locking pin	4

BMW / Mini / PSA - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy

Application range: BMW Mini with 1.4 / 1.6 Valvetronic engines (engine code: N12), Peugeot 207, 308 with 1.4 / 1.6 engines (engine code: EP3 / EP6), Citroën with 1.4 / 1.6 engines (engine code: EP3 / EP6)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0850	7 pcs. BMW / Mini / PSA - Engine Timing Tool Set	140

consists of:

X		
400.0851	1 Crankshaft timing pin	52
400.0852	1 Camshaft locking tool inlet (2)	812
400.0853	1 Camshaft locking tool (EX)	358
400.0854	3 Screws M6 x 30.0 mm	9

PSA / Renault - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Citroën XM, Peugeot 605, Renault Safrane, Espace (engine code: L7X 700 / 701 / 713 / 727 / 731 / XFZ / ES9J4)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1900	11 pcs. PSA / Renault - Engine Timing Tool Set	231

consists of:

X		
400.0286	1 Screw M8 x 35 mm (2)	16
400.0580	5 Crankshaft locking pin Ø 8.0 mm	30
400.1362	1 Locking screw M8 x 70.0 mm	31
400.1386	1 Belt retaining tool	50
400.1904	1 Gauge pin	14
400.1906	1 Camshaft locking tool	896

PSA / Toyota timing belt tensioning tool

- For the professional engine repair
- 7.0 mm square
- Suitable for pre-tensioning timing belt tensioner on the automatic pulley
- Chrome vanadium
- Very high degree of accuracy

Application range: universal usage on many Peugeot and Toyota vehicles

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



150.3011	PSA, Toyota	80

PSA timing belt tensioning tool

- For the professional engine repair
- 8.0 mm square
- Suitable for pre-tensioning timing belt tensioner on the automatic pulley
- Chrome vanadium
- Very high degree of accuracy

Application range: universal usage on many Peugeot vehicles

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



150.3014	PSA	100

Universal fly wheel locking tool set

- For the professional engine repair
- For locking the fly wheel
- Secure hold thanks to optimal positioning
- Special plastic
- Very high degree of accuracy

A Fly wheel Locking device for: Citroën: Synergie 2.0/ Turbo.ZX 1.9D/TD, Xantia 1.9D/TD, Berlingo 1.9D, Dispatch 1.9D/TD, Synergie 1.9D, Relay 1.9D/TD, **Fiat:** Ulysse, 2.0/Turbo Ducato 2.0, FSO: 1.9D, LDV: 200 1.9D, Pilot 1.9D, **Peugeot:** 205 1.6/1.9, 305 1.6/1.9, 309 1.6/1.9, 405 1.6/1.9, 405 1.8/2.0 (92-), 605 2.0, Boxer 2.0, c205 1.8/1.9D, 305 1.8/1.9D, 306 1.8/1.9D/TD, 309 1.8/1.9D 1.8TD, 405 1.8TD, 405 1.9D, 406 1.9D, Partner 1.9D, Talbot / Horizon / Solara 1.9D, J5/Talbot Express 1.9D, 605D/TD, 806 1.9TD, Expert 1.9D, Boxer 1.9D/TD, **Renault:** R5, 1.6D, R9 1.6D, 411 1.6D Express/Extra 1.6D-F8M diesel engines, Clio, Express/Extra, 1.9D earlier F8Q diesel engines, Espace 2.1D, R21 2.1D, R25 2.1D, Trafic Master 2.1D-J85 diesel engines, Clio 1.2/1.4, Express/Extra, R19 1.4, Megane/Scenic 1.4/1.6-E7F/E7J petrol engines, R5 1.7, Clio 1.7/1.8, R19 1.7, R21 1.7 1.7 Megane/Scenic 2.0, Laguna 1.8/2.0, Trafic 1.7-F3N/F3P/F2R petrol engines, Clio, Williams, R19, Megane 2.0 16V Twin-Cam F7P/F7R engines, Laguna/ Safrane 2.0 16V Twin-Cam N7Q/N7U engines

B Fly wheel Locking device for: Renault: Clio, Twingo, Kangoo, Megane/Scenic, 1.2/1.6 D7F + K7M Petrol engine, Megane/Scenic, Kangoo 1.9D FBQ + F9Q Diesel engine (direct injection)

C Fly wheel Locking device for: Citroën: Xsara, Xantia 1.8/2.0XU7 JP/JB petrol engines, Xsara 1.8 16V XU7 JP4 twin cam shaft engines, Xantia 1.9D/TD XUD9BTF diesel engines, Xantia, XM2.1TD XUD 11BTE diesel engines, **Peugeot:** 406, 1.8/2.0 XU7 JP/JB Petrol engine, 406 1.8 16V XU7 JP4 Double cam shaft engines, 306, 405, 605 2.0 16V XU10J4 Double cam shaft engines, 406, 1.9D/TD XUD9BTF Diesel engines, 406, 605 2.1 TD XUD 11BTE Diesel engines

D Fly wheel Locking device for Vauxhall/Opel: 1.2, 1.4, 1.6, 1.8, 2.0 OHC Petrol engines, 1.6D & 1.7, OHC Diesel engines, 1.5 & 1.7 OHE Diesel (Isuzu)-Engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



150.3025	4 pcs. Universal fly wheel locking tool set	30

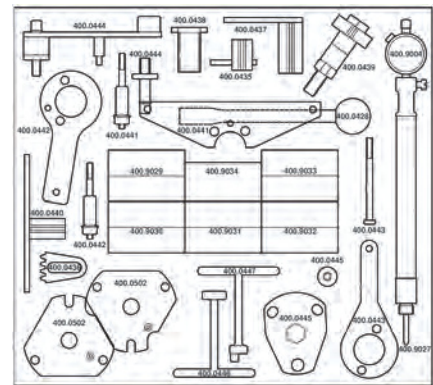
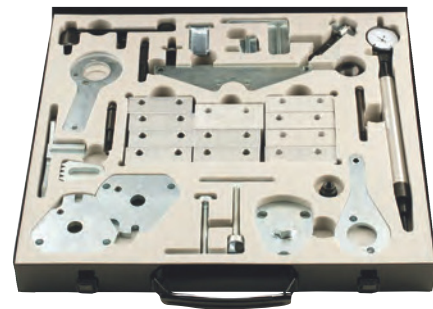
FIAT

Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft and cam shaft
- Suitable for pre-tensioning timing belt tensioner on the automatic pulley
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: universal usage on many Italian vehicles, in particular **Alfa Romeo, Fiat, Lancia** vehicles with 1.4 / 1.6 / 1.8 / 2.0 / Twinspark 1.2 / 1.4 / 1.6 / 1.8 16 V petrol engines 1.6 / 1.8 / 1.9D / TD / 2.0 / 2.1 12V / 2.4 diesel engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0425	34 pcs	Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set	7,57
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consists of:

400.0428	Tensioning tool - pry	170
400.0435	Flywheel locking tool	57
400.0436	Flywheel locking tool	135
400.0437	Flywheel locking tool	100
400.0438	Flywheel locking tool	51
400.0439	Flywheel locking tool	317
400.0440	Flywheel locking tool	136
400.0441	Crankshaft timing tool (2)	154
400.0442	Crankshaft timing tool (2)	154
400.0443	Crankshaft timing tool (3)	160
400.0444	Tensioning tool	240
400.0445	Camshaft locking tool (2)	530
400.0446	Balancer shaft belt tensioning tool	97
400.0447	Tensioning tool - pry	70
400.0502	Camshaft locking tool (2)	400
400.9004	Precision-dial indicator gauge 0 - 10 mm	78
400.9027	TDC determining pin Ø 5.0 mm / dial indicator bracket M14 x 1.25	288
400.9029	Camshaft locking tool (2)	276
400.9030	Camshaft locking tool (2)	251
400.9031	Camshaft locking tool (2)	272
400.9032	Camshaft locking tool (2)	269
400.9033	Camshaft locking tool (2)	276
400.9034	Crankshaft timing tool	178

Alfa Romeo / Fiat / Lancia camshaft alignment tools

- For the professional engine repair
- For locking the cam shaft wheels (TDC position)
- Secure hold thanks to optimal positioning
- Very high degree of accuracy

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



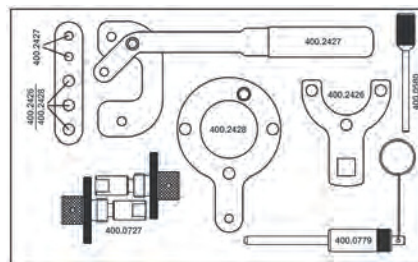
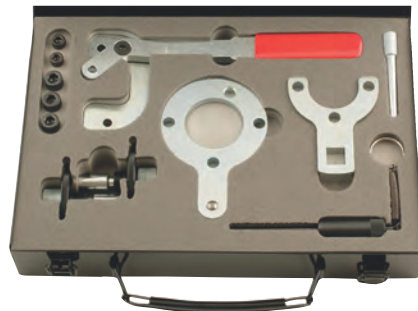
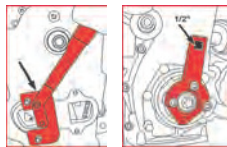
X	Vehicle for	
400.9031	2 Barchetta, Coupe 1.8 16v (> 1996)	272
400.9032	2 Brava, Bravo, Marela, Marela Weekend 1.8 16v (> 1995)	269
400.9033	2 Bravo, Marela, Marela Weekend, Coupe 2.0 20v (> 1994)	276
400.9034	1 Brava, Bravo 1.4 12v (> 1995) Lancia Ypsilon 1.4 12v (1996 - 1999)	178
400.9035	2 Lancia Kappa 2.0 2.4 20v (1994 - 1997), Sello 2.4 20v (> 2001)	269
400.9036	2 Bravo, Marela, Marela Weekend, Coupe 2.0 20v (> 1994)	280

Fiat / Ford / Opel /Suzuki - Engine Timing Tool Set

- For the professional engine repair
- Especially for chain-driven engines
- For changing the steering chain
- Very high degree of accuracy
- In durable steel storage case

Application range: Fiat 1.3 JTD, Opel 1.3 CDTI, Ford 1.3 TDCi, Suzuki (engine code: Z13DT)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2425	12 pcs	Fiat / Ford / Opel /Suzuki - Engine Timing Tool Set	1,12
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consists of:

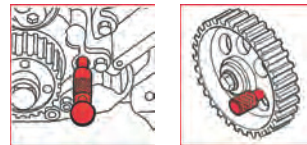
400.0580	Crankshaft locking pin Ø 8,0 mm	30
400.0727	Camshaft locking tool (2)	130
400.0779	Crankshaft locking tool	80
400.2426	Crankshaft pulley flange holding tool (4)	88
400.2427	Timing chain tensioning tool (3)	171
400.2428	Flywheel timing position tool	398

Fiat / Iveco - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft and cam shaft
- For changing the timing belt
- Very high degree of accuracy

Application range: Fiat Ducato, Iveco Daily with 2.3 / 3.0 JTF engines (engine code: F1AE0481C, F1AE0481D, F1AE0481N, F1CE0481D)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0400	5 pcs	Fiat / Iveco - Engine Timing Tool Set	518
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consists of:

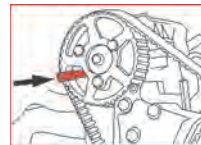
400.0161	Crankshaft TDC locking pin	75
400.0165	Camshaft locking pin 5.0 mm	19
400.0401	Camshaft aligning tool (2)	70
400.0402	Crankshaft timing pin	200

Fiat / GM / Opel / PSA / Renault - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy

Application range: Fiat, PSA, Renault, Opel vehicles with 2.5 / 2.8D engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1775	4 pcs	Fiat / GM / Opel / PSA / Renault - Engine Timing Tool Set	143
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consists of:

400.0165	Camshaft locking pin 5.0 mm	19
400.0754	Camshaft locking pin	51
400.1388	Tensioner adjuster	41

Citroën / Fiat - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft and the diesel pump
- Very high degree of accuracy

Application range: Citroën C15, Relais, Visa, Xantia, XM, Xsara, ZW, Fiat Ducato, Scudo, Ulysse

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1700	4 pcs	Citroën / Fiat - Engine Timing Tool Set	199
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consists of:

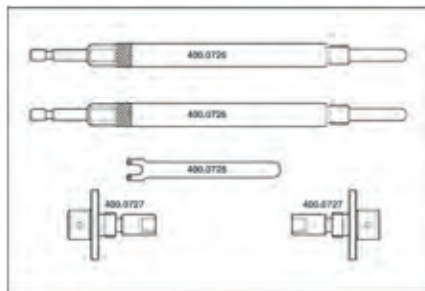
400.0285	Crankshaft locking pin Ø 8,0 mm	97
400.0286	Screw M8 x 35 mm (2)	16
400.0287	Screw M8 x 40,0 mm	18

Alfa Romeo / Fiat - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- Very high degree of accuracy
- In durable steel storage case

Application range: Alfa Romeo Giulietta, Mito, Fiat 500, Brava, Bravo, Grande Punto, Marea, Marea Weekend, Marengo, Palio Weekend, Panda, Punto Classic, Ritmo, Stilo, Idea, Lancia Delta, Susa, Ypsilon with 1.2 16V engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0725	5 pcs	Alfa Romeo / Fiat - Engine Timing Tool Set	989
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consists of:

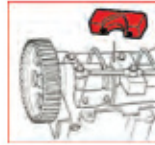
400.0726	Piston height gauge (2)	250
400.0727	Camshaft locking tool (2)	130
400.0728	Tensioner adjusting tool	30

Fiat - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing belt
- Very high degree of accuracy

Application range: Fiat Brava, Bravo with 1.4 12V engines (engine code: 182 A3.000 / 182 A5.000)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0525	4 pcs	Fiat - Engine Timing Tool Set	286
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consists of:

400.0441	Crankshaft timing tool (2)	154
400.0448	Crankshaft locking pin	126
400.9034	Crankshaft timing tool	178

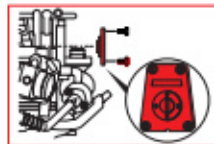


Fiat - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy

Application range: Fiat with 1.7D, TD engines (engine code: 184 B3.000 / 176 A3.000 / 176 A5.000)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2000	4 pcs	Fiat - Engine Timing Tool Set	619
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consists of:

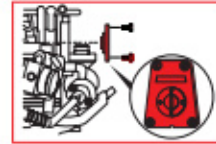
400.0443	Crankshaft timing tool (3)	160
400.0451	Camshaft locking plate	530

Fiat - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy

Application range: Fiat Tipo, Tempra, Ducato (engine code: 149 B1.000 / 160 A6.000 / 160 A7.000 / 160 D1.000 / 230 A2.000 / 230 A3.000 / 230 A4.000 / 280 B1.000)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2025	4 pcs	Fiat - Engine Timing Tool Set	629
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consists of:

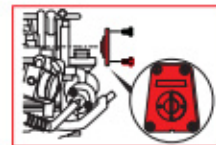
400.0443	Crankshaft timing tool (3)	160
400.0452	Camshaft locking plate	530

Fiat - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy

Application range: Fiat Tipo, Tempra, Ducato with 1.9 TD engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2050	4 pcs	Fiat - Engine Timing Tool Set	586
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consists of:

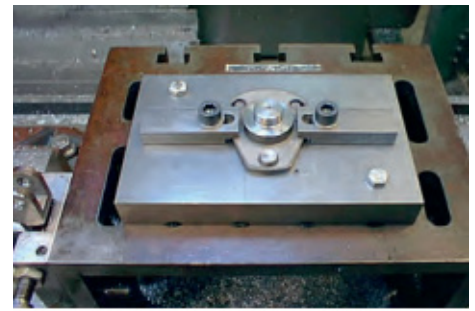
400.0443	Crankshaft timing tool (3)	160
400.0453	Camshaft locking plate	530

Fiat - Engine Timing Tool Set

- For the professional engine repair
- For locking the double cam shaft
- Suitable for pre-tensioning the timing belt tension
- Very high degree of accuracy
- In durable steel storage case

Application range: Fiat Brava, Bravo, Marea, Marea weekend, Multipla, Palio (> 1995) with 1.6 engines. With the tensioning tool the connecting screws can be exchanged from M8 to M10 for one another.

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de

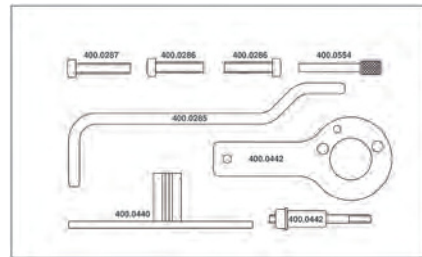


Fiat / Ford - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Fiat 500, Idea, Linea, Punto, Doblo, Panda, Ford Ka with 1.2 / 1.4 8V engines

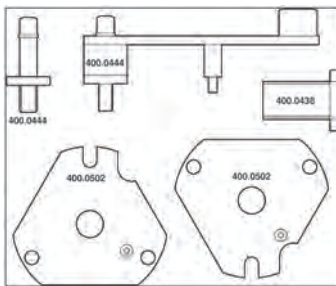
Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0550	8 pcs	Fiat / Peugeot - Engine Timing Tool Set	1,25
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consists of:

400.0285	Crankshaft locking pin Ø 8,0 mm	97
400.0286	Screw M8 x 35 mm (2)	16
400.0287	Screw M8 x 40,0 mm	18
400.0440	Flywheel locking tool	136
400.0442	Crankshaft timing tool (2)	154
400.0554	Locking pin Ø 6,0 mm	19



400.0500	5 pcs	Fiat - Engine Timing Tool Set	1,87
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consists of:

400.0438	Flywheel locking tool	51
400.0444	Tensioning tool	240
400.0502	Camshaft locking tool (2)	400

Fiat - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing belt
- Very high degree of accuracy

Application range: Fiat Punto, Tipo, Tempra, Ducato with 1.7 D/TD / 1.9 D / 1.9 TD diesel engines

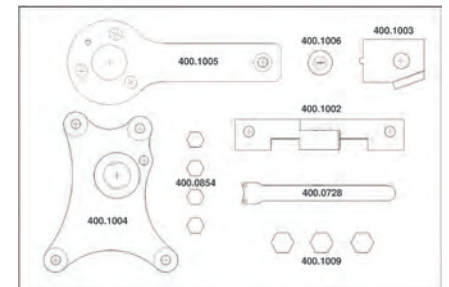
Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0450	4 pcs	Fiat - Engine Timing Tool Set	1,53
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consists of:

X		
400.0445	1	Camshaft locking tool (2)
400.0452	2	Camshaft locking plate



400.1000	13 pcs	Fiat / Ford - Engine Timing Tool Set	1,99
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consists of:

X		
400.0728	1	Tensioner adjusting tool
400.0854	4	Screws M6 x 30,0 mm
400.1002	1	Camshaft setting strap
400.1003	1	Camshaft locking tool M10
400.1004	1	Camshaft cover locking tool
400.1005	1	Crankshaft locking tool
400.1006	1	Screw M10 x 20,0 mm
400.1009	3	Locking screw M8 x 20,0 mm

Fiat / Peugeot - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft and cam shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Fiat Brava, Bravo, Marea, Marea (sic) and Peugeot with 1.9 D/TD engines (> 1996)

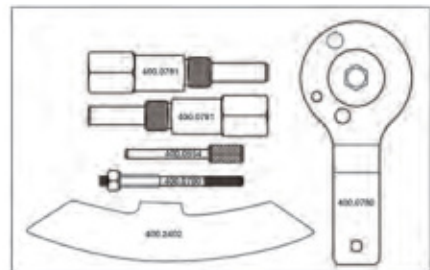
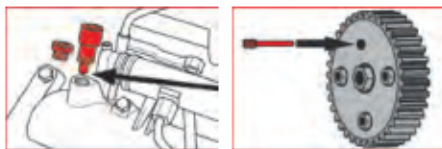
Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de

Alfa Romeo / Fiat - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft or cam shaft and injection pump
- Very high degree of accuracy
- In durable steel storage case

Application range: Fiat vehicles with 1.6 / 1.9 / 2.4 JTD Multijet diesel engines, Alfa Romeo with 2.0 JTD diesel engines (engine code: 939B3.000)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2400	7 pcs	Alfa Romeo / Fiat - Engine Timing Tool Set	1.45
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consists of:

400.0554	Locking pin Ø 6.0 mm	19
400.0780	Crankshaft pulley setting tool (3)	260
400.0781	Camshaft timing pin set (2)	180
400.2402	Flywheel sprocket alignment tool	130

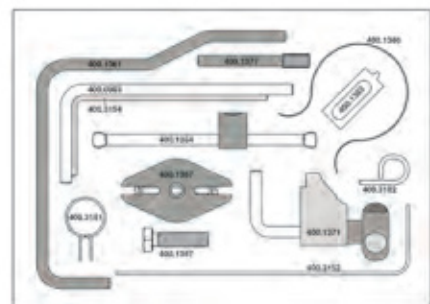
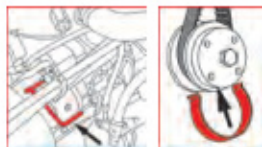


Fiat / PSA - Engine Timing Tool Set

- For the professional engine repair
- For adjusting the valve controls
- For twin cam shaft systems with timing belt/chain combinations
- Very high degree of accuracy
- In durable steel storage case

Application range: Citroën and Fiat with 2.0 / 2.2 SOHC and DOHC engines (engine code: DW10 / DW12)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.3150	12 pcs	Fiat / PSA - Engine Timing Tool Set	814
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consists of:

400.0903	Crankshaft locking pin	85
400.1361	Flywheel locking tool	146
400.1371	Belt retaining tool	99
400.1377	Tensioning locking pin	35
400.1383	Flywheel locking tool	30
400.1384	Tensioner adjuster	118
400.1386	Belt retaining tool	50
400.1387	Crankshaft pulley remover	153
400.3102	Tensioner locking pin	4
400.3151	Crankshaft pulley centralisation tool	2
400.3152	Tensioner locking pin	7
400.3154	Auxiliary drive belt tensioner locking pin Ø 4.0 mm	18

Fiat / Iveco / PSA - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft or fly wheel
- Very high degree of accuracy
- In durable steel storage case

Application range: Fiat Ducato 2.8 TD, JTD, Iveco 2.8 D, TDI, Citroën Relay, Jumper, Peugeot Boxer, Boxer II (engine code: 8140.43 / 8140.43N / 8140.43S / 8140.63)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.3000	6 pcs	Fiat / Iveco / PSA - Engine Timing Tool Set	200
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consists of:

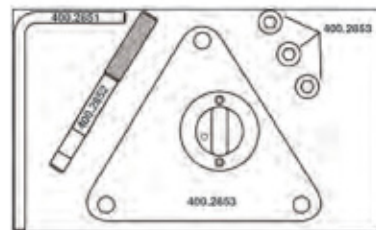
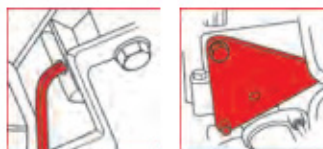
400.0165	Camshaft locking pin 5.0 mm	19
400.1377	Tensioning locking pin	35
400.1388	Tensioner adjuster	41
400.3001	Flywheel holding tool (2)	106

Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set

- For the professional engine repair
- Especially for chain-driven engines
- Very high degree of accuracy
- In durable steel storage case

Application range: Fiat Panda, Punto, 500, 500c, Alfa Romeo Mito, Lancia Ypsilon (engine code: 313A2.000)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2850	6 pcs	Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set	1.60
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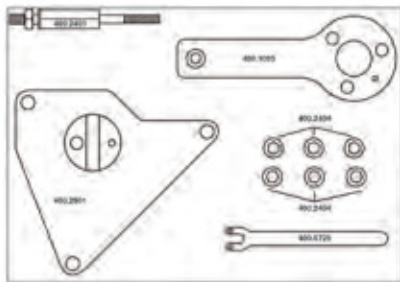
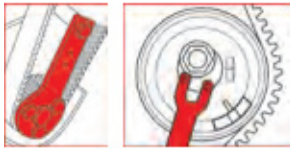
400.2851	Flywheel locking tool	460
400.2852	Pulley locking pin	550
400.2853	Camshaft Locking Plate with screws	490

Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Alfa Romeo Mito, Giulietta MultiAir 105 , MultiAir Turbo 135 , 163 / 170 (2009-2013) Fiat Punto Evo, Punto, Bravo (2009-2013) Lancia Delta (2010-2013) - (engine code: 955A6.000 / 955A7.000 / 955A8.000 / 955A2.000 / 940A2.000)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2900	10 pcs	Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set	1,40
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consists of:

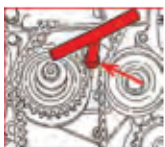
400.0728	Tensioner adjusting tool	30
400.1005	Crankshaft locking tool	7
400.2403	Stud assembly	33
400.2404	Socket head screw M8 x 20 mm	13
400.2901	Tensioner adjusting tool	504

Fiat tension pulley wrench

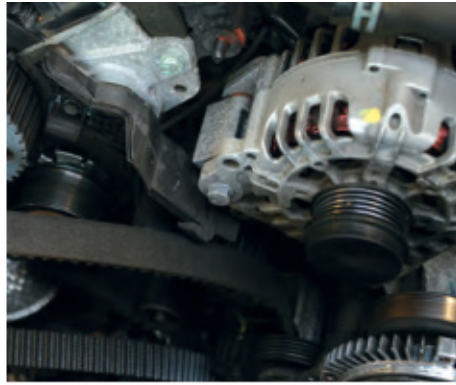
- Eccentric
- Suitable for the assembly and disassembly of the timing belt
- For adjusting the timing belt tension on the automatic pulley
- Not suitable for balancing belts
- With T-handle
- With plastic-coated handle
- Chrome vanadium

Application range: Fiat Brava, Bravo and Marea with 1.8L 16V engines >1996, Fiat Barchetta Coupe 1.8L 16V engine >1996

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



150.1254	Fiat	95,0	80
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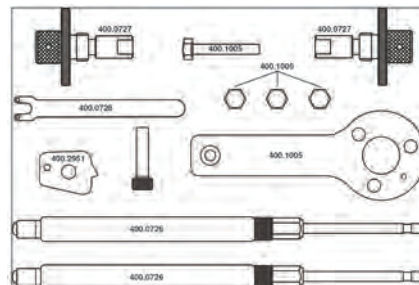


Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Alfa Romeo Giulietta , MiTo Fiat 500, Brava, Bravo, Grande Punto, Marea, Marea Weekend, Marengo, Palio Weekend Panda, Punto, Punto Classic, Ritmo, Stilo, Idea Lancia Delta, Musa, Ypsilon

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2950	12 pcs	Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set	1,22
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consists of:

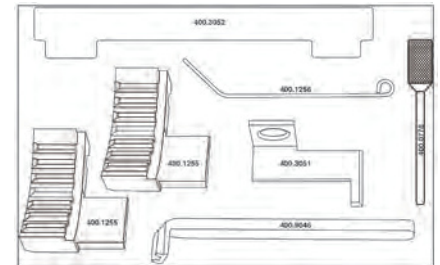
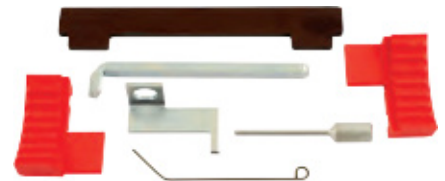
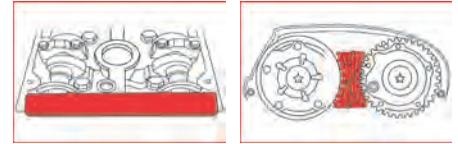
X		
400.0726	1	Piston height gauge (2) 250
400.0727	1	Camshaft locking tool (2) 130
400.0728	1	Tensioner adjusting tool 30
400.1005	5	Crankshaft locking tool 7
400.2951	1	Camshaft pulley holding tool(2) 126

Alfa Romeo / Fiat / GM / Opel - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy

Application range: Chevrolet Cruze, Orlando with 1.4 / 1.6 / 1.8 engines, Opel Astra-G, Astra-H, Corsa-D, Insignia, Meriva, Signum, Vectra-C, Zafira-B, Fiat Croma, Alfa Romeo 159 (engine code: Z / A / 939A4.000)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.3050	7 pcs	Alfa Romeo / Fiat / GM / Opel - Engine Timing Tool Set	424
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consists of:

400.0778	Locking pin	20
400.1255	Camshaft locking tool (2)	56
400.1256	Tensioner locking pin	3
400.3051	Flywheel holding tool	32
400.3052	Camshaft Locking Bar	148
400.9046	Flywheel locking tool	80



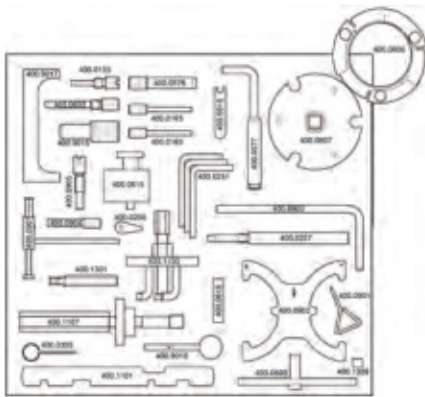
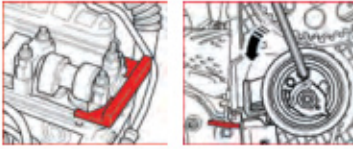
FORD

Ford / VAG - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing belt or the chain
- Very high degree of accuracy
- In durable steel storage case

Application range: Ford vehicles with TDDi / TDCi and Duratorq engines and Ford Galaxy with similar engines to Volkswagen

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1300	31 pcs	Ford / VAG - Engine Timing Tool Set	6.68
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consists of:

400.0155	Crankshaft timing pin	240
400.0165	Camshaft locking pin 5.0 mm	19
400.0251	Injection pump locking pin Ø 6.0 mm	30
400.0257	Crankshaft TDC locking pin	124
400.0258	Shim tool (2)	3
400.0355	Tensioner pushrod retension pin	1
400.0576	Flywheel locking pin	64
400.0577	Flywheel locking tool	124
400.0603	Crankshaft timing pin	51
400.0609	Flywheel locking tool	308

consists of:

400.0615	Crankshaft pulley setting tool	190
400.0616	Flywheel locking adaptor	74
400.0806	Locking tool	45
400.0807	Pump cover locking tool	2
400.0901	Tensioning locking pin	4
400.0902	Camshaft locking tool	384
400.0903	Crankshaft locking pin	85
400.0904	Camshaft/injection pump locking pin	26
400.0905	Crankshaft locking pin	33
400.1101	Camshaft setting strap	140
400.1105	Camshaft sprocket puller	552
400.1106	Fuel sprocket remover	80
400.1107	Chain cover alignment tool	497
400.1301	TX T45 bit	31
400.1309	Flywheel locking adaptor	13
400.9015	Injection pump locking pin Ø 15.4 mm	126
400.9017	Camshaft setting strap	120
400.9018	Injection pump locking pin Ø 6.0 mm	20
400.9019	Tensioner locking tool	20

Ford pulley wheel counter hold wrench

- For the professional engine repair
- Simple assembly and disassembly of the crank shaft pulley wheel
- Special profile opposite to the screw head
- Long lever
- With plastic-coated handle
- Chrome vanadium
- Very high degree of accuracy

Application range: Ford Mondeo, Transit from 2001 onwards with 2.0 / 2.4 / 3.2 Duratorq TDCi engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



	Subcode for	Length mm	
400.9003	Ford	600.0	1.55

Ford fan hub wrench

- For the professional engine repair
- Simple assembly and disassembly of the Visco coupling rotor
- Makes it possible to secure the pulley wheel of the water pump and at the same time release the heating filer
- Special steel
- Very high degree of accuracy

Application range: Ford Transit (2001 - 2006)



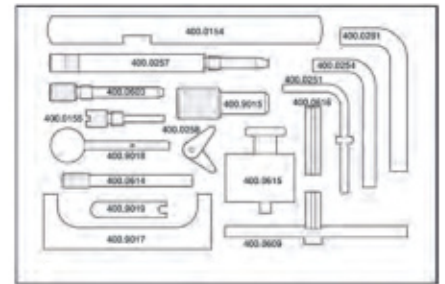
	Subcode for	Pin key mm	
400.9014	Ford	69.0	133

Ford / Mazda - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft or cam shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Ford and Mazda vehicles with 1.2 / 1.3 / 1.4 / 1.6 SOHC and 1.6 / 1.8 / 2.0 16V petrol engines, 1.8 / 1.9 D/TD / 1.9 TDi / 2.5 TDi diesel engines and Zetec engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0600	18 pcs	Ford / Mazda - Engine Timing Tool Set	1.48
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consists of:

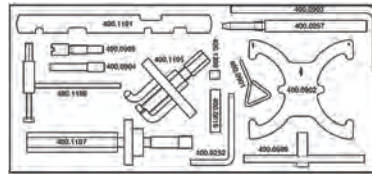
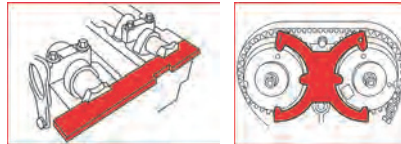
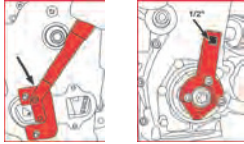
400.0154	Camshaft setting strap	150
400.9018	Injection pump locking pin Ø 6.0 mm	20
400.0155	Crankshaft timing pin	240
400.0251	Injection pump locking pin Ø 6.0 mm	30
400.0254	Locking pin Ø 9.5 mm	60
400.0257	Crankshaft TDC locking pin	124
400.0258	Shim tool (2)	3
400.0281	Timing pin Ø 12.7 mm	569
400.0603	Crankshaft timing pin	51
400.0609	Flywheel locking tool	308
400.0614	Locking pin, Ø 8.25 mm	40
400.0615	Crankshaft pulley setting tool	190
400.0616	Flywheel locking adaptor	74
400.9015	Injection pump locking pin Ø 15.4 mm	126
400.9019	Tensioner locking tool	20
400.9017	Camshaft setting strap	120

Fiat / Ford / Opel /Suzuki - Engine Timing Tool Set

- For the professional engine repair
- Especially for chain-driven engines
- For changing the steering chain
- Very high degree of accuracy
- In durable steel storage case

Application range: Fiat 1.3 JTD, Opel 1.3 CDTI, Ford 1.3 TDCi, Suzuki (engine code: Z13DT)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1200	14 pcs	Ford - Engine Timing Tool Set	2.26
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consists of:

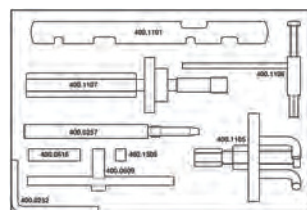
400.0252	Camshaft locking pin 6.0 mm	26
400.1107	Chain cover alignment tool	497
400.1106	Fuel sprocket remover	80
400.1105	Camshaft sprocket puller	552
400.1101	Camshaft setting strap	140
400.0905	Crankshaft locking pin	33
400.0904	Camshaft/injection pump locking pin	26
400.0903	Crankshaft locking pin	85
400.0902	Camshaft locking tool	384
400.0901	Tensioning locking pin	4
400.0257	Crankshaft TDC locking pin	124
400.0609	Flywheel locking tool	308
400.0616	Flywheel locking adaptor	74
400.1309	Flywheel locking adaptor	13

Ford - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the cam belt or the chain
- Very high degree of accuracy
- In durable steel storage case

Application range: Ford vehicles with 1.8 TDDI / TDCI engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1100	9 pcs	Ford - Engine Timing Tool Set	2.00
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consists of:

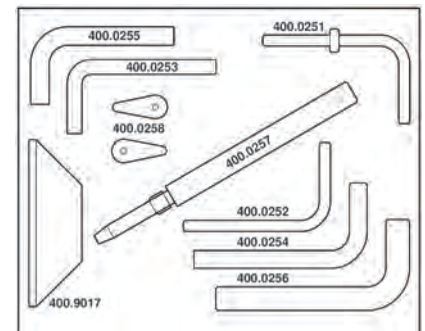
400.0252	Camshaft locking pin 6.0 mm	26
400.1107	Chain cover alignment tool	497
400.1106	Fuel sprocket remover	80
400.1105	Camshaft sprocket puller	552
400.1101	Camshaft setting strap	140
400.0257	Crankshaft TDC locking pin	124
400.0609	Flywheel locking tool	308
400.0616	Flywheel locking adaptor	74
400.1309	Flywheel locking adaptor	13

Ford - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft or cam shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Ford vehicles with 1.6 / 1.8 / 2.5 diesel engines

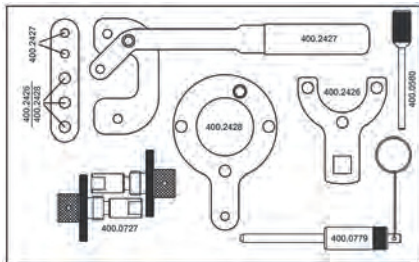
Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0250	10 pcs	Ford - Engine Timing Tool Set	5.90
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consists of:

400.0251	Injection pump locking pin Ø 6.0 mm	30
400.0252	Camshaft locking pin 6.0 mm	26
400.0253	Locking pin Ø 8.0 mm	41
400.0254	Locking pin Ø 9.5 mm	60
400.0255	Locking pin Ø 10.0 mm	60
400.0256	Locking pin Ø 12.0 mm	120
400.0257	Crankshaft TDC locking pin	124
400.0258	Shim tool (2)	3
400.9017	Camshaft setting strap	120



400.2425	12 pcs	Fiat / Ford / Opel /Suzuki - Engine Timing Tool Set	1.12
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consists of:

400.0580	Crankshaft locking pin Ø 8,0 mm	30
400.0727	Camshaft locking tool (2)	130
400.0779	Crankshaft locking tool	80
400.2426	Crankshaft pulley flange holding tool (4)	88
400.2427	Timing chain tensioning tool (3)	171
400.2428	Flywheel timing position tool	398

Ford - Engine Timing Tool Set

- For the professional engine repair
- Expansion set for use in connection with 400.0600
- For locking the crank shaft or cam shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Ford Focus, C-Max with 1.6 Ti VCT engines, Fiesta, Fusion with 1.4 / 1.6 TDCi engines, Mondeo, S-Max, Transit Connect, Tourneo Connect with 1.8 TDDi / TDCi and 2.0 TDCi engines (engine code: HXADA)

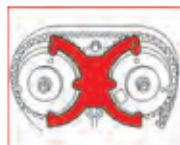
Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de

Ford - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing belt
- Very high degree of accuracy

Application range: Ford Focus, C-Max with 1.6 Ti-VCT and 2.0 TDCi engines (2003-2007) (engine code: HXDA / G6DA / G6DB / G6DC)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0900	5 pcs	Ford - Engine Timing Tool Set
		1.16

consists of:

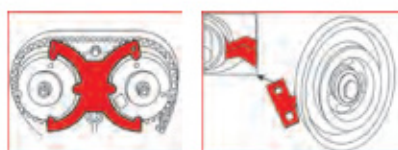
400.0901	Tensioning locking pin	4
400.0902	Camshaft locking tool	384
400.0903	Crankshaft locking pin	85
400.0904	Camshaft/injection pump locking pin	26
400.0905	Crankshaft locking pin	33

Ford / Volvo - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft and cam shaft
- For changing the timing belt
- Very high degree of accuracy

Application range: Ford B-Max (2012), C-Max (2010), Focus (2011), Galaxy (2010), Grand-C-Max (2010-2011), Mondeo (2010), S-Max (2010), Volvo S60 (2001), S80 (2010-2011), V60 (2011), V70 (2010-2011) with 1.6 Ti-VCT, 2.0 TDCi engines (engine code: IQJA / JQDA / JQDB / JQDA / JTDB / JQDA / JQDB / JTWA / JTWB / JQDA / JTDA / JTDB / JTBA / JTBB / B4164T3 / B4164T / B41464T2)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.4125	4 pcs	Ford / Volvo - Engine Timing Tool Set
		498

consists of:

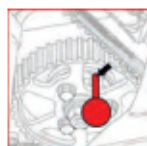
400.0902	Camshaft locking tool	384
400.0905	Crankshaft locking pin	33
400.4126	Crank shaft discs adjustment tool	50
400.4127	Pin for chain tensioner	10

VAG - Engine Timing Tool Set

- For the professional engine repair
- For TDI pump injection engines
- For changing the timing belt
- Secure hold for changing the timing belt or engine repairs

Application range: universal usage for many VAG group vehicles, in particular Audi A3, A4, A6, Skoda Octavia 2, Fabia, Volkswagen Golf, Golf Plus, Jetta, Touran, Lupo, Fox, Bora, Beetle, Caddy, Sharan, Passat, Seat Leon, Toledo, Althea, Alhambra with 1.4 / 1.9 / 2.0 TDi engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2700	7 pcs	VAG - Engine Timing Tool Set
		455

consists of:

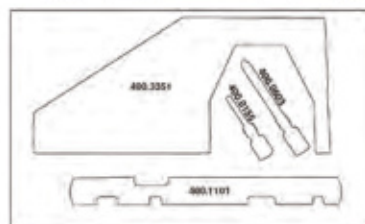
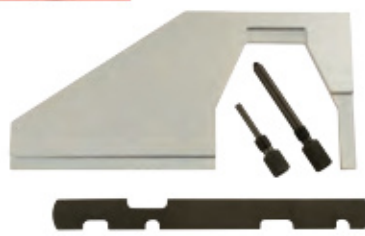
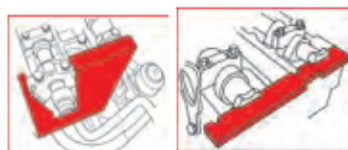
400.0615	Crankshaft pulley setting tool	190
400.0901	Tensioning locking pin	4
400.1415	Crankshaft pulley setting tool	192
400.1425	Tensioning locking pin	11
400.9018	Injection pump locking pin Ø 6.0 mm	20

Ford / Mazda - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft and cam shaft
- For changing the timing belt
- Very high degree of accuracy

Application range: Ford Mondeo with 1.8 engines and Mazda 3, 5, 6, CV7, MX5, MPV, Tribute with Zetec/Duratec or DISI engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.3350	4 pcs	Ford / Mazda - Engine Timing Tool Set
		1.05

consists of:

400.0155	Crankshaft timing pin	240
400.0603	Crankshaft timing pin	51
400.1101	Camshaft setting strap	140
400.3351	Camshaft Locking Plate	780

Ford / Volvo - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft or cam shaft
- For changing the timing belt
- Very high degree of accuracy

Application range: Ford, Volvo with petrol engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1525	4 pcs	Ford / Volvo - Engine Timing Tool Set
		291

consists of:

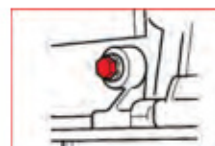
400.0155	Crankshaft timing pin	240
400.0603	Crankshaft timing pin	51
400.0905	Crankshaft locking pin	33
400.1101	Camshaft setting strap	140

Ford / Mazda - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft
- Especially for Ford 16V vehicles
- Very high degree of accuracy

Application range: Ford Fiesta 1.25 / 1.4 engines, Puma 1.4 / 1.7 engines, Mondeo 1.6 / 1.8 / 2.0 engines, Mazda 121 with 1.25 engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0175	2 pcs	Ford / Mazda - Engine Timing Tool Set
		180

consists of:

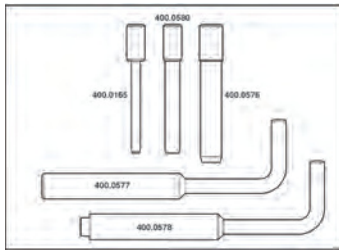
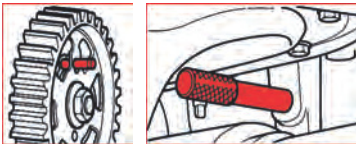
400.0154	Camshaft setting strap	150
400.0155	Crankshaft timing pin	240

Ford - Engine Timing Tool Set

- For the professional engine repair
- Expansion set for Ford Duratorque engines
- For locking the crank shaft and cam shaft
- For changing the timing belt or the chain
- Very high degree of accuracy
- In durable steel storage case

Application range: Ford Duratorq-engines Fiesta and Fusion with 1.4 D/TDCi engines with timing belt, Mondeo, Transit 2.0 D/Di with timing chain, Puma, Transit with 2.4 D/Di/TDDi with timing chain, Mondeo with 2.0 / 2.2 TDCi with timing chain, Transit (2000-2008) with 2.0 / 2.2 TDCi, 2.4 TDi with timing chain

Please carry out an up-to-date cross reference test for the specific ehicle on www.timingtools.de



400.0575	5 pcs	Ford - Engine Timing Tool Set	319
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consists of:

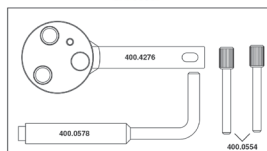
	X		
400.0165	2	Camshaft locking pin 5,0 mm	19
400.0576	1	Flywheel locking pin	64
400.0577	1	Flywheel locking tool	124
400.0578	1	Flywheel locking pin	122
400.0580	1	Crankshaft locking pin Ø 8,0 mm	30

Ford - Engine Timing Tool Set

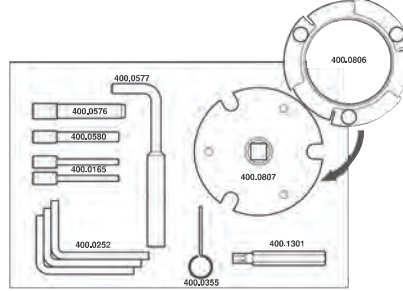
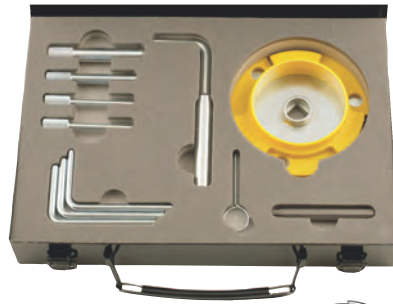
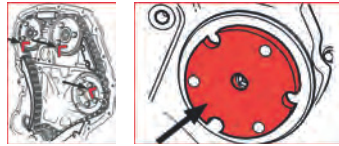
- For the professional engine repair
- For locking the cam shaft
- For changing the timing belt or the chain
- Very high degree of accuracy
- In durable steel storage case

Application range: Ford vehicles with chain-driven 2.0 / 2.4 Duratorq engines (2002-2010), also for the belt change on 1.4 / 1.6 engines. Contains tool for the removal and exchanging of fuel injection pumps on Ford 2.0 / 2.4 Duratorq Di/TDDi and 2.2 / 2.4 Duratorq TDCi diesel engines

Please carry out an up-to-date test for the specific ehicle on www.timingtool.de



400.4275	4 pcs	Ford - Engine Timing Tool Set	415
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400.0800	11 pcs	Ford - Engine Timing Tool Set	956
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consists of:

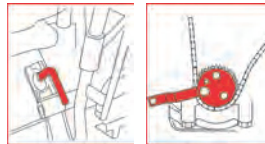
	X		
400.0165	2	Camshaft locking pin 5,0 mm	19
400.0252	2	Camshaft locking pin 6,0 mm	26
400.0355	1	Tensioner pushrod retension pin	1
400.0576	1	Flywheel locking pin Ø 12 mm	64
400.0577	1	Flywheel locking tool Ø 8 mm, 126 mm	124
400.0580	1	Crankshaft locking pin Ø 8,0 mm, 70 mm	30
400.0806	1	Locking tool	45
400.0807	1	Pump cover locking tool	2
400.1301	1	TX T45 bit, 75 mm	31

Ford - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing belt
- Very high degree of accuracy

Application range: Ford Transit 2.2 TDCi engines (> 2006), including Econetic and HDT engines

Please carry out an up-to-date cross reference test for the specific ehicle on www.timingtools.de



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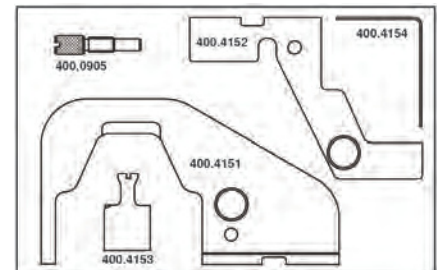
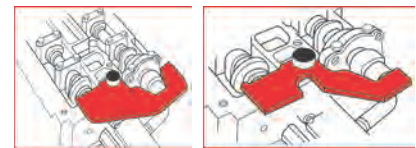
	X		
400.0554	2	Locking pin Ø 6,0 mm	19
400.0578	1	Flywheel locking pin	122
400.4276	1	Crank shaft chain wheel holding tool	200

Ford - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft and cam shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Ford Galaxy (2010), Mondeo (2010), S Max (2010), Focus (2011) with 2.0 SCTI Ecoboost / Ti-VCT engines (engine code: TNWA / TNWB / TNBA / TPWA / MGDA / XQDA)

Please carry out an up-to-date cross reference test for the specific ehicle on www.timingtools.de



400.4150	5 pcs	Ford - Engine Timing Tool Set	218
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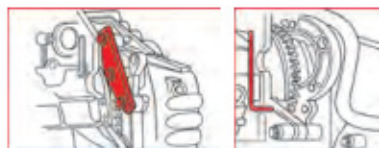
	X		
400.0905	1	Crankshaft locking pin	33
400.4151	1	Cam shaft alignment plate	700
400.4152	1	Cam shaft alignment plate	250
400.4153	1	Pin for aligning the cam shaft	30
400.4154	1	Tension pin 2,0 mm	20

Ford / Land Rover / PSA / Volvo - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy

Application range: Ford, Land Rover, PSA, Volvo vehicles with 2.0 / 2.2 DOHC Common-Rail Diesel engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1625	3 pcs	Ford / Land Rover / PSA / Volvo - Engine Timing Tool Set	473
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consists of:

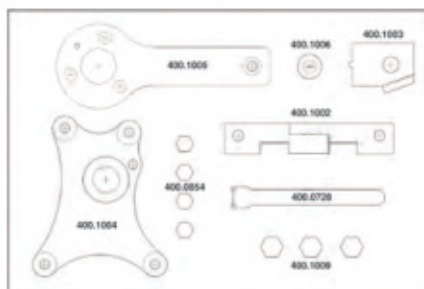
400.0580	Crankshaft locking pin Ø 8,0 mm	30
400.0609	Flywheel locking tool	308
400.0903	Crankshaft locking pin	85

Fiat / Ford - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Fiat 500, Idea, Linea, Punto, Doblo, Panda, Ford Ka with 1.2 / 1.4 8V engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1000	13 pcs	Fiat / Ford - Engine Timing Tool Set	1.99
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consists of:

X	Q	
400.0728	1	Tensioner adjusting tool
400.0854	4	Screw M6 x 30,0 mm
400.1002	1	Camshaft setting strap
400.1003	1	Camshaft locking tool M10
400.1004	1	Camshaft cover locking tool
400.1005	1	Crankshaft locking tool
400.1006	1	Screw M10 x 20,0 mm
400.1009	3	Locking screw M8 x 20,0 mm

GM

GM / Opel - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft or chain tensioner
- Very high degree of accuracy

Application range: Opel Astra-G, Vectra-B, Vectra-C, Signum, Zafira-A (engine code: Z22SE / Z22YH)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2325	2 pcs	GM / Opel - Engine Timing Tool Set	787
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consists of:

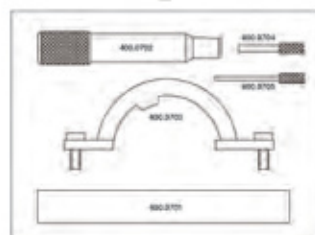
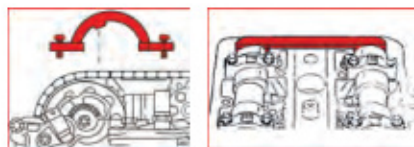
400.2326	Camshaft locking tool	786
400.2327	Timing chain tensioner locking pin	1

GM / Isuzu / Opel / Saab - Engine Timing Tool Set

- For the professional engine repair
- Especially for chain-driven vehicles
- For locking dual cam shafts
- Very high degree of accuracy
- In durable steel storage case

Application range: Opel Agila, Astra-G, Astra-H, Combo-C, Corsa-B, Corsa-C, Corsa-D, Meriva-A, Tigra-B (1993-2010) with 1.0 12V / 1.2 16V engines (engine code: X10XE / Z10XE / Z10 XEP / X12XE / Z12XE / Z12 XEP / Z14XEL / Z14XEA) and similar Isuzu- and Saab-engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0700	5 pcs	GM / Isuzu / Opel / Saab - Engine Timing Tool Set	446
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consists of:

X	Q	
400.0701	1	Camshaft timing tool
400.0702	1	Flywheel TDC locking pin
400.0703	1	Camshaft position (CMP) sensor disc setting tool
400.0704	1	Tensioner retaining pin
400.0705	1	Tensioner retaining pin

GM / Opel - Engine Timing Tool Set

- For the professional engine repair
- Expansion set
- For engines without thread attachment bore holes
- Very high degree of accuracy

Application range: Opel Astra-F, Astra-G, Cavalier, Vectra-A (1997 - 2001) with 1.7 engines (engine code: 17DR / X17DT / DTL)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0650	5 pcs	GM / Opel - Engine Timing Tool Set	380
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consists of:

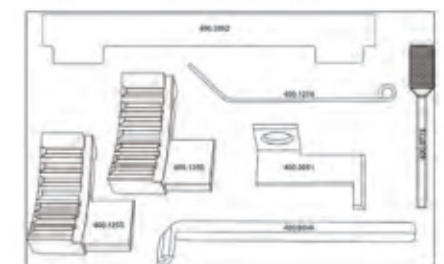
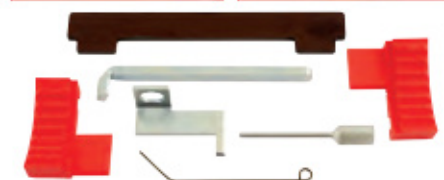
400.0651	Camshaft locking tool (3)	169
400.0652	Flywheel TDC indicator	80
400.0653	Flywheel locking pin	79

Alfa Romeo / Fiat / GM / Opel - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy

Application range: Chevrolet Cruze, Orlando with 1.4 / 1.6 / 1.8 engines, Opel Astra-G, Astra-H, Corsa-D, Insignia, Meriva, Signum, Vectra-C, Zafira-B, Fiat Croma, Alfa Romeo 159 (engine code: Z / A / 939A4.000)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.3050	7 pcs	Alfa Romeo / Fiat / GM / Opel - Engine Timing Tool Set	424
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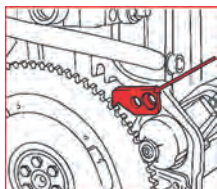
consists of:

400.0778	Locking pin	20	
400.1255	Camshaft locking tool (2)	56	
400.1256	Tensioner locking pin	3	
400.3051	Flywheel holding tool	32	
400.3052	Camshaft Locking Bar	148	
400.9046	Flywheel locking tool	80	

GM / Opel Fly wheel locking tool

- For locking the fly wheel
- For easily attaching to one of the small fixing pins next to the fly wheel
- Special steel

Application range: for all Opel and GM 4 and 6 cylinder CIH, 24V and OHC engines



400.9045	GM / Opel Fly wheel locking tool	80	

HONDA

Honda - Engine Timing Tool Set

- For the professional engine repair
- For locking the belt drive on twin-cam, dual-cam shaft engines
- Very high degree of accuracy

Application range: Honda Civic, Accord, Prelude, Shuttle, Odyssey (engine code: F18A3 / F18B2 / F18B4 / F20AF / F20B3 / F20B5 / F20B6 / F20B7 / F20Z1 / F20Z2 / F22Z2 / F22B5 / F22B8 / F22A2 / H22A5 / H22A7 / H22A8 / F23A7 / F23Z5 / H23A2 / H23A3 / J30A1 / B16A2 / F18A3)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2525	5 pcs Honda - Engine Timing Tool Set	194	

consists of:

X			
400.0165	2 Camshaft locking pin 5.0 mm	19	
400.0753	1 Locking screw M6 x 30.0 mm	10	
400.2526	1 Tensioner locking pin tool	60	
400.2527	1 Balance shaft locking tool	46	

HYUNDAI

Hyundai / Mitsubishi / Volvo - Engine Timing Tool Set

- For the professional engine repair
- For actuating belt tensioners
- Very high degree of accuracy

Application range: universal usage on many Hyundai, Mitsubishi, Volvo vehicles

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0075	2 pcs Hyundai / Mitsubishi / Volvo - Engine Timing Tool Set	131	

consists of:

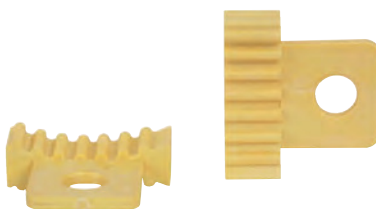
400.0076	Tensioning locking pin	630	
400.0077	Belt tensioner wrench	210	

Hyundai cam shaft locking tool

- For the professional engine repair
- Clamping device for a secure hold to change the timing belt
- Special plastic
- Very high degree of accuracy

Application range: Hyundai Sontana from 1999 onwards

Please carry out an up-to-date test for the specific vehicle on www.timingtool.de



X			
150.3058	1 Hyundai cam shaft locking tool	30	



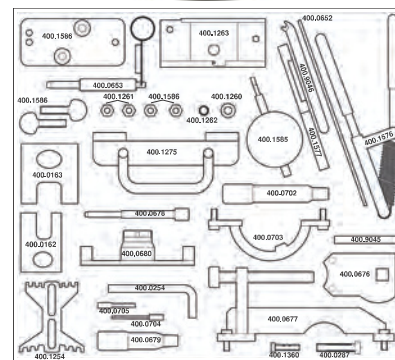
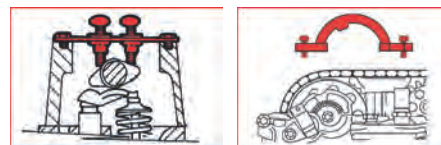
ISUZU

Isuzu / GM / Opel / Saab - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Opel Agila, Ascona, Astra-F, Astra-G, Corsa-B, Corsa-C, Frontera, Kadett-E, Midi, Monterey, Omega-B, Sintra, Vectra-A, Vectra-B, Vectra-C, Zafira and similar Isuzu and Saab vehicles

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1575	33 pcs Isuzu / GM / Opel / Saab - Engine Timing Tool Set	3.91	

consists of:

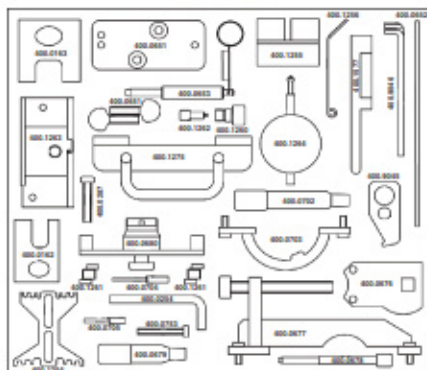
400.0162	Opel / Saab Camshaft locking tool	186	
400.0163	Camshaft locking tool	143	
400.0254	Locking pin Ø 9.5 mm	60	
400.0287	Screw M8 x 40,0 mm	18	
400.0652	Flywheel TDC indicator	80	
400.0653	Flywheel locking pin with spring on ring, 103 mm	79	
400.0676	Camshaft turning tool	7	
400.0677	Bracket for timing adjustment wrench	111	
400.0678	Injection pump locking pin	41	
400.0679	Flywheel TDC locking pin	160	
400.0680	Camshaft locking tool	322	
400.0702	Flywheel TDC locking pin	205	
400.0703	Camshaft position (CMP) sensor disc setting tool	102	
400.0704	Tensioner retaining pin, Ø2,5mm	4	
400.0705	Tensioner retaining pin, Ø4,0mm	5	
400.1254	Flywheel locking tool	23	
400.1260	Camshaft locking tool (5)	9	
400.1261	Locking screw M6 x 10,0 mm	4	
400.1262	Special tip	10	
400.1263	Mounting bracket assy	330	
400.1275	Camshaft setting strap (TDC)	404	
400.1360	Flywheel locking tool	82	
400.1576	Belt tensioner adjuster	297	
400.1577	Camshaft setting strap	99	
400.1585	Dial gauge Ø 51 (10 x 0.01 mm)	154	
400.1586	Camshaft position locking tool (5)	170	
400.9045	Flywheel locking tool	80	
400.9046	Flywheel locking tool	80	

GM / Isuzu / Opel / Saab - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Opel Agila, Ascona, Astra-F, Astra-G, Astramax, Belmont, Cavalier, Corsa-B, Corsa-C, Frontera, Kadett-E, Midi, Monterey, Omega-B, Sintra, Vectra-A, Vectra-B, Vectra-C, Zafira with petrol and diesel engines including Eco-Tec engines and similar **Isuzu** and **Saab** engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1250	36 pcs	GM / Isuzu / Opel / Saab - Engine Timing Tool Set	6.18

consists of:

X			
400.0162	1	Opel / Saab Camshaft locking tool, blue	186
400.0163	1	Opel Camshaft locking tool, gold	143
400.0254	1	Locking pin Ø 9.5 mm	60
400.0287	1	Screw M8 x 40,0 mm	18
400.0651	1	Camshaft locking tool (3), 110 x 50 mm	169
400.0652	1	Flywheel TDC indicator	80
400.0653	1	Flywheel locking pin with spring on ring, 103 mm	79
400.0676	1	Camshaft turning tool	7
400.0677	1	Bracket for timing adjustment wrench	111
400.0678	1	Injection pump locking pin, Ø 6 mm, 110 mm	41
400.0679	1	Flywheel TDC locking pin Ø 12 mm, 96 mm	160
400.0680	1	Camshaft locking tool 120 mm	322
400.0702	1	Flywheel TDC locking pin Ø 12 mm, 113 mm	205
400.0703	1	Camshaft position (CMP) sensor disc setting tool	102
400.0704	1	Tensioner retaining pin, Ø2,5mm	4
400.0705	1	Tensioner retaining pin, Ø4,0mm	5
400.0753	1	Locking screw M6 x 30,0 mm	10
400.1254	1	Flywheel locking tool, 70 x 54 mm	23
400.1255	1	Opel Camshaft locking tool (2), red	56
400.1256	1	Tensioner locking pin for 400.1250	3

consists of:

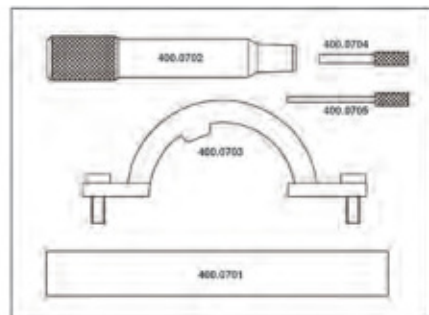
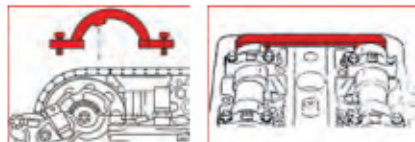
X			
400.1260	1	Screw for 400.1263	9
400.1261	4	Locking screw M6 x 10,0 mm	4
400.1262	1	Special tip	10
400.1263	1	Mounting bracket assy	330
400.1264	1	Dial gauge Ø 51 (10 x 0,01 mm), 103 mm	161
400.1275	1	Camshaft setting strap (TDC)	404
400.9045	1	Flywheel locking tool, 62 x 30 mm	80
400.9046	1	Flywheel locking tool, 130 mm	80
400.1577	1	Camshaft setting strap 140 mm	99

GM / Isuzu / Opel / Saab - Engine Timing Tool Set

- For the professional engine repair
- Especially for chain-driven vehicles
- For locking dual cam shafts
- Very high degree of accuracy
- In durable steel storage case

Application range: Opel Agila, Astra-G, Astra-H, Combo-C, Corsa-B, Corsa-C, Corsa-D, Meriva-A, Tigra-B (1993-2010) with 1.0 12V / 1.2 16V engines (engine code: X10XE / Z10XE / Z10 XEP / X12XE / Z12XE / Z12 XEP / Z14XEL / Z14XEA) and similar **Isuzu** and **Saab** engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0700	5 pcs	GM / Isuzu / Opel / Saab - Engine Timing Tool Set	446

consists of:

X			
400.0701	1	Camshaft timing tool	404
400.0702	1	Flywheel TDC locking pin	205
400.0703	1	Camshaft position (CMP) sensor disc setting tool	102
400.0704	1	Tensioner retaining pin	4
400.0705	1	Tensioner retaining pin	5

GM / Isuzu / Opel / Saab - Camshaft locking tool

- For the professional engine repair
- Clamping device for a secure hold to change the timing belt
- Aluminium
- Very high degree of accuracy

Application range: Opel Tigra 2004 - 2008 (engine code: Z18XE) with 1.8 engines, Frontera, Frontera-B and Sintra-A, Omega-B 1995 - 2004 (engine code: X22SE, X33XE, YEESE, Y22XE Z22XE) with 2.2 16V engines. **Saab** 9-3 1996 - 2005 with 1.8 engines (engine code: Z18XE) and similar **Isuzu** and **Saab** engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



X			
400.0162	1	GM / Isuzu / Opel / Saab - Camshaft locking tool	186

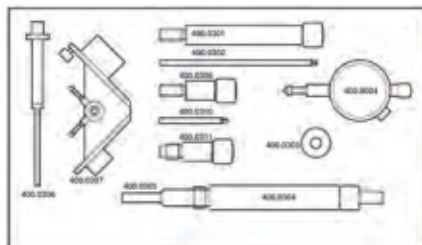
IVECO

Diesel fuel pump timing set

- For the professional engine repair
- Precise measuring device for the upper entry hole
- For resetting the injection time on diesel engines
- Very high degree of accuracy
- In durable steel storage case

Application range: Alfa Romeo, Audi, BMW, Daihatsu, Fiat, Ford, Isuzu, Iveco, Lancia, Land Rover, Mazda, Mitsubishi, Nissan, PSA (XUD), Renault, Rover, Volkswagen vehicles with Bosch, EP/VE Rotary, Niki, Nippon Denso, CAV RotoDiesel, Top injection fuel pumps

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de




400.0300	11 pcs	Diesel fuel pump timing set	710

consists of:

X			
400.0301	1	Dial gauge adapter M8 (Bosch), long	71
400.0302	1	Dial gauge extension, long 99 mm	9
400.0303	1	Converter M8 x M12	12

consists of:

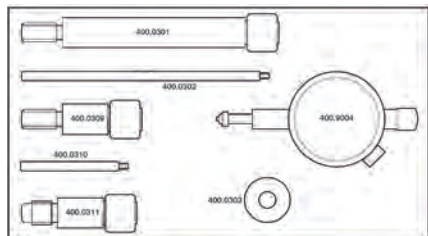
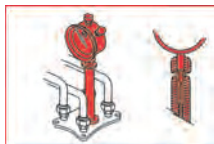
		
400.0304	TDC determining pin / dial indicator bracket M14 x 2.0 mm	135
400.0305	Extension	460
400.0306	Dial gauge probe for Lukas-CAV-Roto	17
400.0307	Dial gauge assy for Lukas-CAV-Roto	125
400.0309	Dial gauge adapter M8 (Bosch) short, silver	37
400.0310	Dial gauge extension short	4
400.0311	Dial gauge adapter M10 (Bosch) short, black	40
400.9004	Precision-dial indicator gauge 0 - 10 mm	78


Diesel fuel pump timing set

- For the professional engine repair
- Precise measuring device
- Very high degree of accuracy
- In durable steel storage case


Application range: Alfa Romeo, Audi, BMW, Daihatsu, Fiat, Ford, Isuzu, Iveco, Lancia, Land Rover, Mazda, Mitsubishi, Nissan, Renault, Rover and Volkswagen vehicles with Bosch, Kikki, Nippon Denso injection pumps with threads of M8, M10 and M12, with new M10 Adapter in particular for Ford Transit

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



		
400.0325	7 pcs Diesel fuel pump timing set	301

consists of:

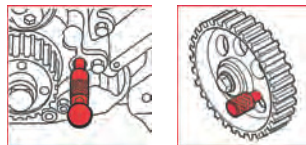
		
400.0301	Dial gauge adapter M8 (Bosch), long	71
400.0302	Dial gauge extension, long 99 mm	9
400.0303	Converter M8 x M12	12
400.9004	Precision-dial indicator gauge 0 - 10 mm	78
400.0309	Dial gauge adapter M8 (Bosch) short, silver	37
400.0310	Dial gauge extension short	4
400.0311	Dial gauge adapter M10 (Bosch) short, black	40


Fiat / Iveco - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft and cam shaft
- For changing the timing belt
- Very high degree of accuracy


Application range: Fiat Ducato, Iveco Daily with 2.3 / 3.0 JTF engines (engine code: F1AE0481C, F1AE0481D, F1AE0481N, F1CE0481D)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



			
400.0400	5 pcs	Fiat / Iveco - Engine Timing Tool Set	518

consists of:

		
400.0161	Crankshaft TDC locking pin	75
400.0165	Camshaft locking pin 5.0 mm	19
400.0401	Camshaft aligning tool (2)	70
400.0402	Crankshaft timing pin	200


Fiat / Iveco / PSA - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft or fly wheel
- Very high degree of accuracy
- In durable steel storage case


Application range: Fiat Ducato 2.8 TD, JTD, Iveco 2.8 D, TDI, Citroën Relay, Jumper, Peugeot Boxer, Boxer II (engine code: 8140.43 / 8140.43N / 8140.43S / 8140.63)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



			
400.3000	6 pcs	Fiat / Iveco / PSA - Engine Timing Tool Set	200

consists of:

		
400.0165	Camshaft locking pin 5.0 mm	19
400.1377	Tensioning locking pin	35
400.1388	Tensioner adjuster	41
400.3001	Flywheel holding tool (2)	106

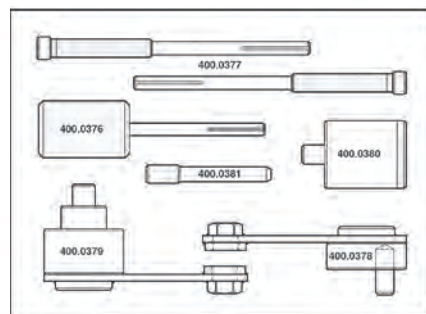
JAGUAR


Land Rover / Jaguar - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case


Application range: Land Rover Discovery, Range Rover Sport with 2.7 TDV6 engines and Jaguar S Type with TDV6 V6 engines, including fly wheel locking tool for automatic and manual transmissions (engine code: 276D T)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



			
400.0375	7 pcs	Land Rover / Jaguar - Engine Timing Tool Set	912

consists of:

		
400.0376	Camshaft sprocket locking tool	165
400.0377	Camshaft sprocket locking pin (2)	68
400.0378	Flywheel locking tool - automatic tensioner	195
400.0379	Flywheel locking tool - manual tensioner	268
400.0380	Flywheel locking tool	222
400.0381	Coolant Pump tensioning locking pin	30

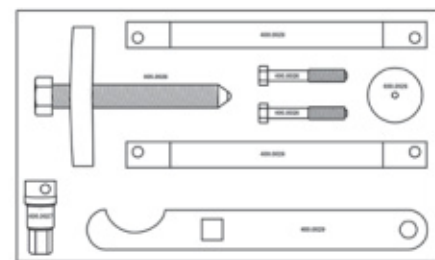
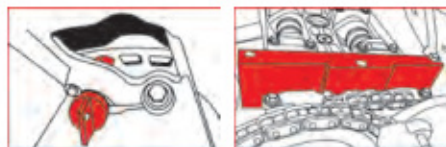


Jaguar / Land Rover - Engine Timing Tool Set

- For the professional engine repair
- Especially for chain-driven vehicles
- Very high degree of accuracy
- In durable steel storage case

Application range: Jaguar and Daimler V8, Sport 4.0 / 3.2 / 4.2 / 3.5, S-Type, XJ8, XJR, XK8, XKR (< 2010) with 4.0 / 4.2 V8 engines (engine code: BC / LB / LC / GC / AC / KC / DC / CC / CE / NC / EG / PA / HB / 1B / RB / SB / TB / 3B / PC / NB), Land Rover Discovery3, Range Rover 4.2, Supercharged 4.4 (engine code: 4PN / 428PS)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0025	9 pcs	Jaguar / Land Rover - Engine Timing Tool Set	3.51
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consists of:

400.0026	Crankshaft pulley puller (4)	530
400.0027	Crankshaft locking tool	70
400.0028	Camshaft locking tool (2)	740
400.0029	Timing chain wrench	200

KIA

KIA cam shaft locking tool

- For the professional engine repair
- Clamping device for a secure hold to change the timing belt
- Special plastic
- Very high degree of accuracy

Application range: Kia Clarus 1.6 - 1.8 from 1997 onwards

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



150.3055	1	KIA cam shaft locking tool	40
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KIA cam shaft locking tool

- For the professional engine repair
- Clamping device for a secure hold to change the timing belt
- Special plastic
- Very high degree of accuracy

Application range: Kia Carnival Diesel from 1998 onwards

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



150.3056	1	KIA cam shaft locking tool	80
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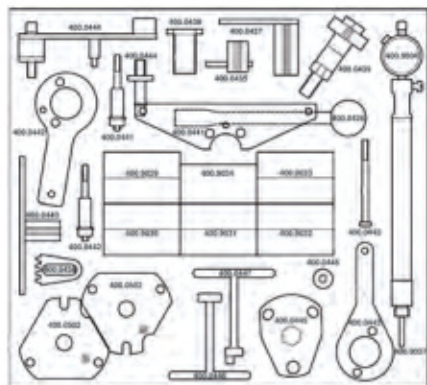
LANCIA

Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft and cam shaft
- Suitable for pre-tensioning timing belt tensioner on the automatic pulley
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: universal usage on many Italian vehicles, in particular Alfa Romeo, Fiat, Lancia vehicles with 1.4 / 1.6 / 1.8 / 2.0 / Twinspark 1.2 / 1.4 / 1.6 / 1.8 16 V petrol engines 1.6 / 1.8 / 1.9D / TD / 2.0 / 2.1 12V / 2.4 diesel engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0425	34 pcs	Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set	7.57
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consists of:

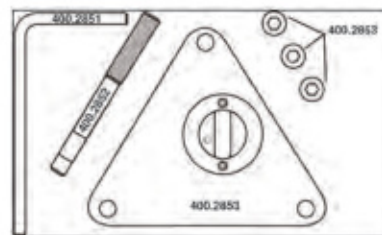
400.0428	Tensioning tool - pry	170
400.0435	Flywheel locking tool	57
400.0436	Flywheel locking tool	135
400.0437	Flywheel locking tool	100
400.0438	Flywheel locking tool	51
400.0439	Flywheel locking tool	317
400.0440	Flywheel locking tool	136
400.0441	Crankshaft timing tool (2)	154
400.0442	Crankshaft timing tool (2)	154
400.0443	Crankshaft timing tool (3)	160
400.0444	Tensioning tool	240
400.0445	Camshaft locking tool (2)	530
400.0446	Balancer shaft belt tensioning tool	97
400.0447	Tensioning tool - pry	70
400.0502	Camshaft locking tool (2)	400
400.9004	Precision-dial indicator gauge 0 - 10 mm	78
400.9027	TDC determining pin Ø 5,0 mm / dial indicator bracket M14 x 1.25	288
400.9029	Camshaft locking tool (2)	276
400.9030	Camshaft locking tool (2)	251
400.9031	Camshaft locking tool (2)	272
400.9032	Camshaft locking tool (2)	269
400.9033	Camshaft locking tool (2)	276
400.9034	Crankshaft timing tool	178

Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set

- For the professional engine repair
- Especially for chain-driven engines
- Very high degree of accuracy
- In durable steel storage case

Application range: Fiat Panda, Punto, 500, 500c, Alfa Romeo Mito, Lancia Ypsilon (engine code: 313A2.000)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2850	6 pcs	Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set	1.60
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consists of:

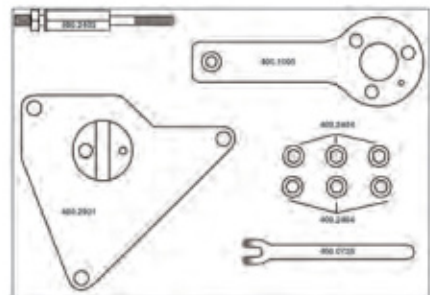
400.2851	Flywheel locking tool	460	
400.2852	Pulley locking pin	550	
400.2853	Camshaft Locking Plate with screws	490	

Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Alfa Romeo Mito, Giulietta MultiAir 105, MultiAir Turbo 135, 163 / 170 (2009-2013) Fiat Punto Evo, Punto, Bravo (2009-2013) Lancia Delta (2010-2013) - (engine code: 955A6.000 / 955A7.000 / 955A8.000 / 955A2.000 / 940A2.000)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2900	10 pcs Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set	1.40	

consists of:

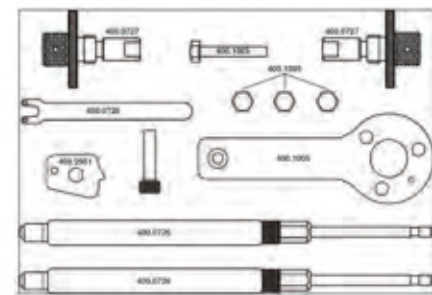
400.0728	Tensioner adjusting tool	30	
400.1005	Crankshaft locking tool	7	
400.2403	Stud assembly	33	
400.2404	Socket head screw M8 x 20 mm	13	
400.2901	Tensioner adjusting tool	504	

Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Alfa Romeo Giulietta, MiTo Fiat 500, Brava, Bravo, Grande Punto, Marea, Marea Weekend, Marengo, Palio Weekend Panda, Punto, Punto Classic, Ritmo, Stilo, Idea Lancia Delta, Musa, Ypsilon

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2950	12 pcs Alfa Romeo / Fiat / Lancia - Engine Timing Tool Set	1.22	

consists of:

X			
400.0726	1	Piston height gauge (2)	250
400.0727	1	Camshaft locking tool (2)	130
400.0728	1	Tensioner adjusting tool	30
400.1005	5	Crankshaft locking tool	7
400.2951	1	Camshaft pulley holding tool(2)	126

Alfa Romeo / Fiat / Lancia camshaft alignment tools

- For the professional engine repair
- For locking the cam shaft wheels (TDC position)
- Secure hold thanks to optimal positioning
- Very high degree of accuracy

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



X		Substitue for	
400.9034	1	Brava, Bravo 1.4 12v (> 1995) Lancia Ypsilon 1.4 12v (1996 - 1999)	178
400.9035	2	Lancia Kappa 2.0 2.4 20v (1994 - 1997), Stilo 2.4 20v (> 2001)	269

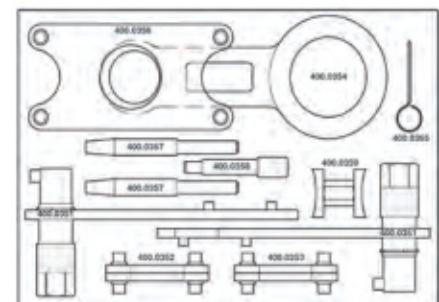
LAND ROVER

Land Rover / MG / Rover - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft of all KV6 variants
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Rover 825, 45, 75, Land Rover Freelander 2.5, MG ZS, ZT, ZT-T 160, 180, 190 with 2.0 / 2.5 V6 Quad-Cam petrol engines

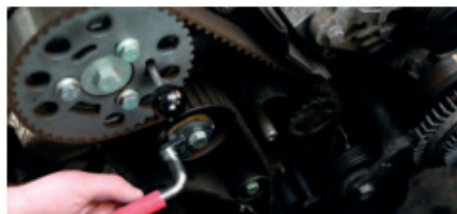
Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de

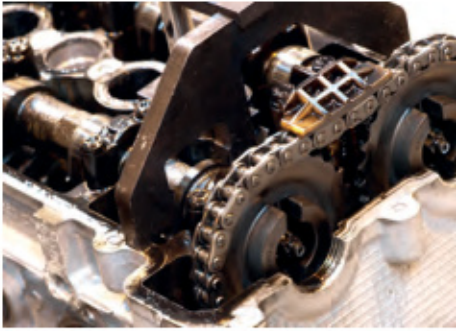


400.0350	12 pcs Land Rover / MG / Rover - Engine Timing Tool Set	3.62	

consists of:

400.0351	Crankshaft timing tool (2)	500	
400.0352	Camshaft locking adaptor set, 2.0 L (2)	76	
400.0353	Camshaft locking adaptor set, 2.5 L (2)	80	
400.0354	Rear camshaft sprocket setting tool	480	
400.0355	Tensioner pushrod retension pin	1	
400.0356	Rear camshaft sprocket setting tool	390	
400.0357	Rear camshaft sprocket guide pin	50	
400.0358	Crankshaft locking pin	40	
400.0359	Rear cam sprocket spreader	80	



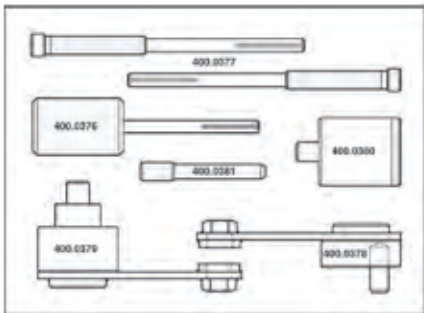


Land Rover / Jaguar - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Land Rover Discovery, Range Rover Sport with 2.7 TDV6 engines and Jaguar S Type with TDV6 engines, including fly wheel locking tool for automatic and manual transmissions (engine code: 276D T)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0375	7 pcs	Land Rover / Jaguar - Engine Timing Tool Set	912
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consists of:

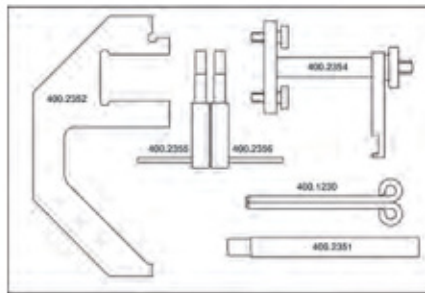
400.0376	Camshaft sprocket locking tool	165
400.0377	Camshaft sprocket locking pin (2)	68
400.0378	Flywheel locking tool - automatic tensioner	195
400.0379	Flywheel locking tool - manual tensioner	268
400.0380	Flywheel locking tool	222
400.0381	Coolant Pump tensioning locking pin	30

BMW / Land Rover / Rover - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft or cam shaft
- For changing the timing belt or the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: BMW 1, 3, 5, X3, Land Rover Freelander, Rover 75 (engine code: M47)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2350	7 pcs	BMW / Land Rover / Rover - Engine Timing Tool Set	1,03
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consists of:

400.1230	Tensioning locking pin (2)	14
400.2351	Crankshaft TDC locking pin	108
400.2352	Camshaft locking tool	461
400.2354	Camshaft locking holding tool	240
400.2355	Crankshaft timing tool	52
400.2356	Crankshaft timing tool	55

Land Rover / Rover - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft or fly dis
- For changing the timing belt
- Very high degree of accuracy

Application range: Land Rover Freelander 1.8, Rover Metro, 214, 216, 218 16V, 414, 416 16V, 216, 416 GTi, Rover Diesel 218, 418

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.2600	3 pcs	Land Rover / Rover - Engine Timing Tool Set	1,50
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consists of:

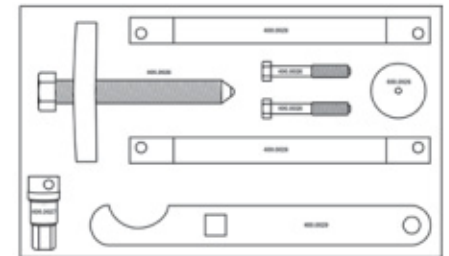
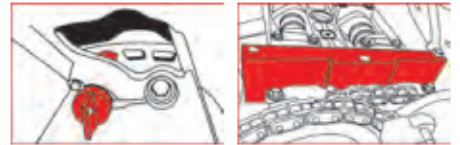
400.2601	Flywheel locking tool	470
400.2602	Flywheel locking tool	480
400.2603	Flywheel locking tool	460

Jaguar / Land Rover - Engine Timing Tool Set

- For the professional engine repair
- Especially for chain-driven vehicles
- Very high degree of accuracy
- In durable steel storage case

Application range: Jaguar and Daimler V8, Sport 4.0 / 3.2 / 4.2 / 3.5, S-Type, XJ8, XJR, XK8, XKR (< 2010) with 4.0 / 4.2 V8 engines (engine code: BC / LB / LC / GC / AC / KC / DC / CC / CE / NC / EG / PA / HB / 1B / RB / SB / TB / 3B / PC / NB), Land Rover Discovery3, Range Rover 4.2, Supercharged 4.4 (engine code: 4PN / 428PS)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0025	9 pcs	Jaguar / Land Rover - Engine Timing Tool Set	3,51
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consists of:

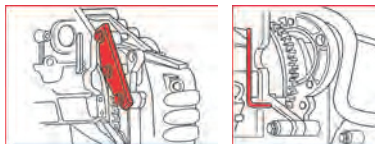
400.0026	Crankshaft pulley puller (4)	530
400.0027	Crankshaft locking tool	70
400.0028	Camshaft locking tool (2)	740
400.0029	Timing chain wrench	200

Ford / Land Rover / PSA / Volvo - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy

Application range: Ford, Land Rover, PSA, Volvo vehicles with 2,0 / 2,2 DOHC Common-Rail Diesel engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1625	3 pcs	Ford / Land Rover / PSA / Volvo - Engine Timing Tool Set	473
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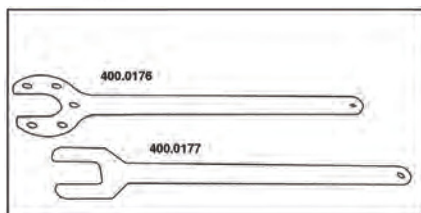
consists of:

400.0580	Crankshaft locking pin Ø 8,0 mm	30
400.0609	Flywheel locking tool	308
400.0903	Crankshaft locking pin	85

Land Rover fan hub wrench set

- For counter holding the Visco coupling drive shaft
- Makes it possible to secure the pulley wheel of the water pump and at the same time release the heating filer
- Also suitable for the removal of the viscous connecting socket on the cooler ventilator
- Special steel

Application range: Land Rover Discovery II, Range Rover, Defender 1990-2006 with Td5 or V8 engines



400.4175	2 pcs	Land Rover fan hub wrench set	18,29
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consists of:

400.0176	Holding wrench for Visco fan for Land Rover	1,05
400.0177	Visco fan wrench 36,0 mm for Land Rover	14,78

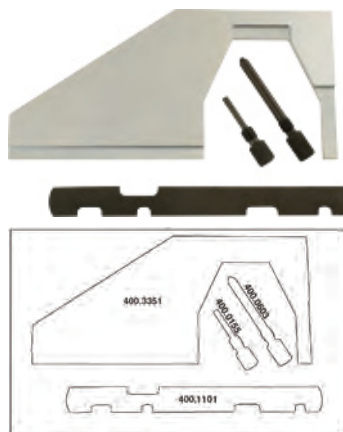
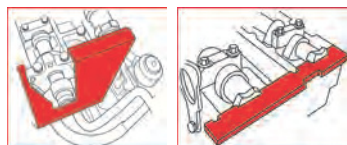
MAZDA

Ford / Mazda - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft and cam shaft
- For changing the timing belt
- Very high degree of accuracy

Application range: Ford Mondeo with 1.8 engines and Mazda 3, 5, 6, CV7, MX5, MPV, Tribute with Zetec/Duratec or DISI engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.3350	4 pcs	Ford / Mazda - Engine Timing Tool Set	1,05
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consists of:

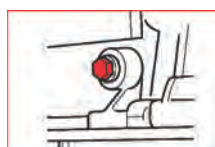
400.0155	Crankshaft timing pin	240
400.0603	Crankshaft timing pin	51
400.1101	Camshaft setting strap	140
400.3351	Camshaft Locking Plate	780

Ford / Mazda - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft
- Especially for Ford 16V vehicles
- Very high degree of accuracy

Application range: Ford Fiesta 1.25 / 1.4 engines, Puma 1.4 / 1.7 engines, Mondeo 1.6 / 1.8 / 2.0 engines, Mazda 121 with 1.25 engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0175	2 pcs	Ford / Mazda - Engine Timing Tool Set	180
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consists of:

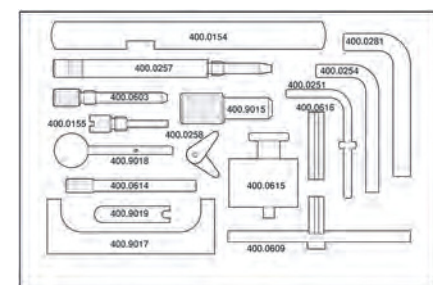
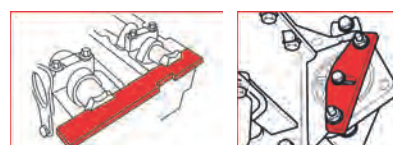
400.0154	Camshaft setting strap	150
400.0155	Crankshaft timing pin	240

Ford / Mazda - Engine Timing Tool Set

- For the professional engine repair
- For locking the crank shaft or cam shaft
- For changing the timing belt
- Very high degree of accuracy
- In durable steel storage case

Application range: Ford and Mazda vehicles with 1.2 / 1.3 / 1.4 / 1.6 SOHC and 1.6 / 1.8 / 2.0 16V petrol engines, 1.8 / 1.9 D/TD / 1.9 TDi / 2.5 TDi diesel engines and Zetec engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0600	18 pcs	Ford / Mazda - Engine Timing Tool Set	1,48
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consists of:

400.0154	Camshaft setting strap	150
400.9018	Injection pump locking pin Ø 6,0 mm	20
400.0155	Crankshaft timing pin	240
400.0251	Injection pump locking pin Ø 6,0 mm	30
400.0254	Locking pin Ø 9,5 mm	60
400.0257	Crankshaft TDC locking pin	124
400.0258	Shim tool (2)	3
400.0281	Timing pin Ø 12,7 mm	569
400.0603	Crankshaft timing pin	51
400.0609	Flywheel locking tool	308
400.0614	Locking pin, Ø 8,25 mm	40
400.0615	Crankshaft pulley setting tool	190
400.0616	Flywheel locking adaptor	74
400.9015	Injection pump locking pin Ø 15,4 mm	126
400.9019	Tensioner locking tool	20
400.9017	Camshaft setting strap	120

Mazda cam shaft locking tool

- For the professional engine repair
- Clamping device for a secure hold to change the timing belt
- Special plastic
- Very high degree of accuracy

Application range: Mazda 626 from 1992 / 323 from 1998, Premacy from 1999 onwards

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



X			
150.3050	1	Mazda cam shaft locking tool	50

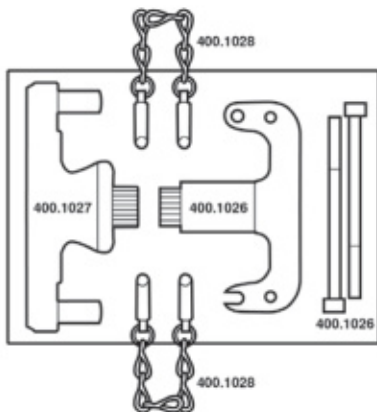
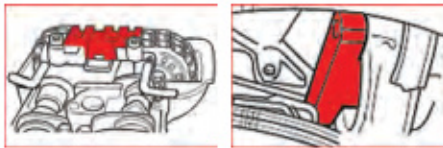
MERCEDES

Chrysler / Mercedes - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: Mercedes vehicles with 2.2 / 2.7 CRD engines, Chrysler PT Cruiser with 2.2 CRD engines, Jeep Grand Cherokee with 2.7 CRD engines

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.1025	6 pcs	Chrysler / Mercedes - Engine Timing Tool Set	1.45

consists of:

400.1026	Flywheel locking tool (3)	197	
400.1027	Flywheel locking tool	436	
400.1028	Camshaft locking tool (2)	36	

Mercedes cam shaft locking tool

- For the professional engine repair
- For locking the cam shaft wheels when removing the cylinder head
- Secure hold thanks to optimal positioning
- Very high degree of accuracy

Application range: for Mercedes A-, B-, C-, CLC-, CLK-, CLS-, E-, G-, GL-, M-, R-, S-, SLK-, V classes, Sprinter, Vito and Viano with petrol engines (engine code: M104, M111, M112, M119, M120, M272, M273) and diesel engines with 4 valve technology (engine code: OM605, OM606, OM611, OM612, OM613, OM614, OM628, OM629, OM640, OM642, OM643, OM646, OM648 EVO, OM647, OM648, OM649)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



	Suitable for	Ø mm	Length mm	
550.1193	Mercedes	5,8 x 6,0	212,0	38

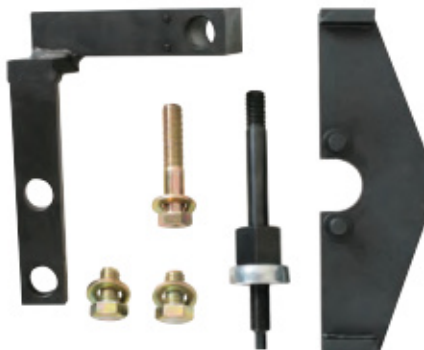
MINI

BMW / Mini - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy

Application range: BMW Mini (2001-2006) (engine code: W10B16AA/BA)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.9090	7 pcs	BMW / Mini - Engine Timing Tool Set	1.93

consists of:

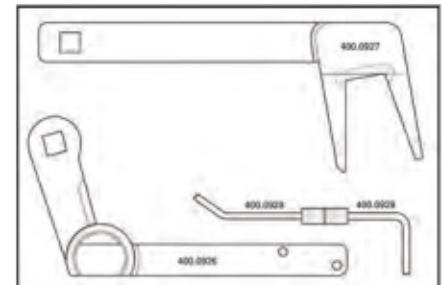
400.9091	Camshaft locking tool	575	
400.9092	Engine support bracket (4)	615	
400.9093	Timing chain pre-tensioning tool	215	

BMW / Mini - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: BMW Mini One, Cooper, Cooper S with 1.6 petrol engines (engine code: W10B16AA / W10B16BA / W11B16AA)

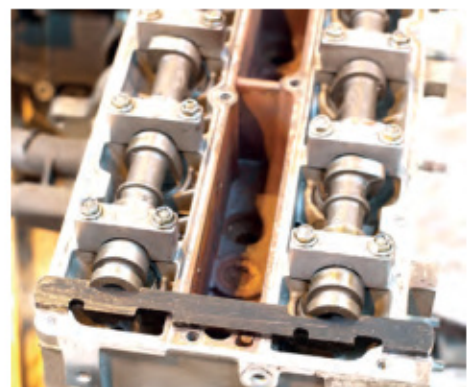
Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



400.0925	4 pcs	BMW / Mini - Engine Timing Tool Set	2.02

consists of:

400.0926	Serpentine belt tensioner	441	
400.0927	Camshaft pulley loosening tools	421	
400.0928	Tensioning locking pin	19	
400.0929	Locking pin	20	

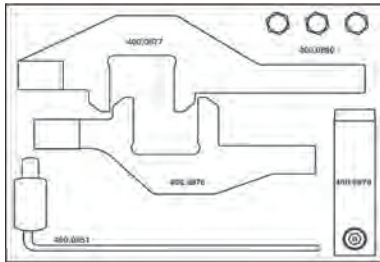
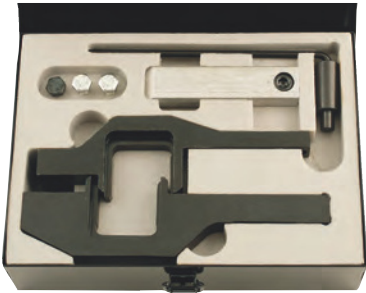
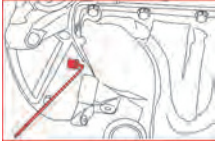


BMW / Mini / PSA - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy
- In durable steel storage case

Application range: BMW Mini with 1.6 engines (engine code: N14 / R56), Peugeot 207, 308 with 1.6 engines (engine code: EP6 / EP6DT / DTS), Citroën with 1.6 engines (engine code: EP6 / EP6DT / DTS)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



X				P	
400.0875	7 pcs	BMW / Mini / PSA - Engine Timing Tool Set		1,49	

consists of:

X				P	
400.0851		Crankshaft timing pin		52	
400.0876		Camshaft alignment tool (inlet)		270	
400.0877		Camshaft alignment tool (exhaust)		423	
400.0878		Support clamp		93	
400.0880		Screw M6 x 30,0 mm (3)		7	

BMW / Mini / PSA - Engine Timing Tool Set

- For the professional engine repair
- For locking the cam shaft
- For changing the timing chain
- Very high degree of accuracy

Application range: BMW Mini with 1.4 / 1.6 Valvetronic engines (engine code: N12), Peugeot 207, 308 with 1.4 / 1.6 engines (engine code: EP3 / EP6), Citroën with 1.4 / 1.6 engines (engine code: EP3 / EP6)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



X				P	
400.0850	7 pcs	BMW / Mini / PSA - Engine Timing Tool Set		1,40	

consists of:

X				P	
400.0851	1	Crankshaft timing pin		52	
400.0852	1	Camshaft locking tool inlet (2)		812	
400.0853	1	Camshaft locking tool (EX)		358	
400.0854	3	Screwn M6 x 30,0 mm		9	

BMW / Mini - Engine Timing Tool Set

- For the professional engine repair
- For changing the timing belt
- Very high degree of accuracy

Application range: BMW Mini with 16V engines (engine code: W16D)

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



X				P	
400.2475	8 pcs	BMW / Mini - Engine Timing Tool Set		126	

consists of:

X				P	
400.0165	2	Camshaft locking pin 5,0 mm		19	
400.0580	1	Crankshaft locking pin Ø 8,0 mm, 70 mm		30	
400.2476	1	Flywheel locking pin, BMW-Mini (5)		40	

MITSUBISHI

Hyundai / Mitsubishi / Volvo - Engine Timing Tool Set

- For the professional engine repair
- For actuating belt tensioners
- Very high degree of accuracy

Application range: universal usage on many Hyundai, Mitsubishi, Volvo vehicles

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



X				P	
400.0075	2 pcs	Hyundai / Mitsubishi / Volvo - Engine Timing Tool Set		131	

consists of:

X				P	
400.0076		Tensioning locking pin		630	
400.0077		Belt tensioner wrench		210	

Mitsubishi cam shaft locking tool

- For the professional engine repair
- Clamping device for a secure hold to change the timing belt
- Special plastic
- Very high degree of accuracy

Application range: Mitsubishi Space Wagon 1997 onwards

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



X				P	
150.3051	1	Mitsubishi cam shaft locking tool		30	

Mitsubishi cam shaft locking tool

- For the professional engine repair
- Clamping device for a secure hold to change the timing belt
- Special plastic
- Very high degree of accuracy

Application range: Mitsubishi Carisma from 1996 onwards, Space Star from 1997 onwards, Galant 2.0GTI from 1991 onwards

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



X				P	
150.3052	2	Mitsubishi cam shaft locking tool		60	

Mitsubishi cam shaft locking tool

- For the professional engine repair
- Clamping device for a secure hold to change the timing belt
- Special plastic
- Very high degree of accuracy

Application range: Mitsubishi 24V Galant 2.5 from 1997 onwards, 24V Sigma 3.0 from 1991 onwards, Galant 4 x 4 from 1991 onwards

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



X				P	
150.3053	2	Mitsubishi cam shaft locking tool		60	

Mitsubishi cam shaft locking tool

- For the professional engine repair
- Clamping device for a secure hold to change the timing belt
- Special plastic
- Very high degree of accuracy

Application range: Mitsubishi Pajero 3500 from 1998 onwards

Please carry out an up-to-date cross reference test for the specific vehicle on www.timingtools.de



X				P	
150.3054	2	Mitsubishi cam shaft locking tool		70	