

## Double Ring Spanner, Open | for Diesel Injector Pipes | 17 mm

- open double ring spanner, offset and angled
- surface finish: satin chrome plated
- profile: 12-point
- for hard to reach places
- suitable for most diesel engines
- wrench size: 17 mm



Item #
8291

## Injector Puller | for Mercedes-Benz CDI Engines

- suitable for Mercedes-Benz CDI engines 611, 612, 613 ff.
- for loosening injectors from the cylinder head
- no more disassembling of the cylinder head necessary
- striking weight 2.0 kg



Item #
1678

## Sockets for Diesel Injectors

12.5 1/2



Item #	Description
2538	Socket for Diesel Injectors   12.5 mm (1/2") Drive   22 mm
2539	Socket for Diesel Injectors   12.5 mm (1/2") Drive   27 mm



## Pre-Chamber Socket for Mercedes-Benz CDI

- 12.5 mm (1/2") drive multi-spline socket 1.5 x 58 mm
- allows changing of the diesel pre-chamber
- fits on MB engines from 1989
- suitable for engines with the following codes: 601, 602, 602.91, 603, 604, 605, 606, 661, 662
- to be used as OEM 603589000900 / 603589010900
- surface finish: phosphated



Item #
5430

## Special Wrench for Injection Lines | for Mercedes-Benz | 10 mm (3/8") Drive | 14 mm 10 3/8

- wrench size: 14 mm
- profile: 12-point
- surface finish: satin chrome plated
- length: 85.5 mm

Item #
8469



## Injector Puller | for BMW

- for pulling out stuck common rail injectors
- disassembly of the cylinder head is not necessary
- support on the cylinder head allows high extraction forces
- suitable for BMW engines M47TU, M57, M57TU
- 2 support feet 115 mm
- 2 support feet 140 mm
- supporting bridge with ball bearing
- spindle M16, one side M17 thread, for mounting in the injector
- 29 mm socket for disassembling the electric unit
- internal 6-pt wrench for removing the injector needle

Item #
8782



## HDI Injector Puller

- allows the extraction of Bosch and Siemens HDI injectors
- disassembly of cylinder heads is not necessary
- suitable for most vehicles with PSA 2.0 HDI DW10, DW12 engines, also on Toyota, Mazda, Hyundai
- high traction is reached by pulling the cylinder head
- 2 ball bearing puller spindles for injectors with different internal thread diameter
- 2 open sockets for removal of the electric unit
- high performance support frame with spindle bearings

Item #
8349



## Puller for Common Rail Injectors

- suitable for e. g.: Mercedes-Benz CDI engines 611, 612 and 613
- for pulling out stuck common rail injectors
- special tool construction allows to pull injector with high force
- heavy version

Item #	Description
8237	Puller for Common Rail Injectors
8237-29	Socket, Hexagon   slotted   29 mm



## Injector Puller | for Mercedes-Benz CDI engines | 4 pcs.

- suitable for assembling and disassembling tightly fit common rail injectors
- suitable for e. g. Mercedes-Benz CDI engines 611, 612 and 613
- suitable for working in confined spaces due to the low support cylinder diameter
- special tool construction allows to pull injector with high force
- 1 injector socket set, 12.5 mm (1/2") drive, internal hexagon 10 mm
- 1 protection ring for mounting under the pull-out sleeve
- 1 socket 29 mm, slot opening: 50 mm, drive: 22 mm
- 1 pulling spindle / pull-out sleeve, external hexagon drive: 21, 22 mm, slot opening: 85 mm



Item #
8244

## Extractor for Common Rail Injector Needles

- the 3-jaw puller allows a safe removal even of stuck injectors
- it is not necessary to drill a hole into the injector needle, thus even injector needles, which rotate when drilling a hole can be removed



Item #
8309



## Adjustment & O-Ring Mounting Tool Set for VAG Pump-Nozzle Unit

- allows precise positioning of the pump /nozzle unit and a damage-free installation of the O-rings
- not correctly installed pump/nozzle units present a risk of damage to the cylinder head and the pump/nozzle unit

### suitable for following VAG Pump/Nozzle engines:

- 5 cyl. & 10-cyl. VW Phaeton, Touareg as of 2003, T5 as of 2004, etc.
- 4 cyl. VW Golf, Touareg, Audi A3 from 2004, etc.
- setting gauge, steel made, to be used as OEM T10210
- O-ring mounting sleeve, brass made, to be used as OEM T10056/1
- O-ring mounting sleeve, brass made, to be used as OEM T10056/2
- O-ring mounting sleeve, brass made, to be used as OEM T10056/3
- O-ring mounting sleeve, brass made, to be used as OEM T10164/1
- O-ring mounting sleeve, brass made, to be used as OEM T10164/2



Item #

8954

## FSI Nozzle Assembly/Disassembly Set

- suitable for VW, Audi, Seat, Skoda with direct injection engines and engines with pump-injector units
- to be used as OEM tool kit T10133 + T10163
- puller for dismantling FSI injectors, use as T10133/1
- puller claw for dismantling FSI injectors, use as T10133/2
- sliding hammer, use as T10133/3
- cone for mounting the combustion chamber rings use as T10133/53
- calibration tools for mounting the combustion chamber rings, use as T10133/6, T10133/7, T10133/8
- built-in pin for mounting the FSI injectors, to be used as T10133/9
- extractor for dismantling pump-injector units



Item #

68345

## Injector Removal Tool | for Air Hammers

- for disassembly of hard to remove injectors
- special construction with pulling rod and sliding clamp for extracting injectors with air hammers
- suitable for pneumatic hammer BGS 3515, injector dismantling claw from BGS 7777 and separate claws 7777-1, 7777-2, 7777-3
- material: S45C / Cr-Mo steel
- overall length: 510 mm
- handle length: 110 mm



Item #

9308



## Injector Gasket Puller | 350 mm

- especially developed for extracting burnt in copper sealing washers from the injector shaft
- helps to avoid damages to the cylinder head
- slim construction with conical tip, knurled handle and sliding weight

Item #
62630-1



## Injector Gasket Puller | 230 mm

- for removal of hard to loosen copper rings in the injector shaft of injection engines

Item #
62630



## Injector Seat and Shaft Cleaning Set

- allows efficient cleaning of injector ports, injector nozzle ports in cylinder heads and injector seats
- suitable for a wide range of vehicles
- helps to avoid blow-back due to poorly seated injectors
- 3 steel wire brushes
  - brass coated
  - for removing combustion residues on injector ports
- 2 silicone nylon brushes
  - for cleaning injector seat surfaces in the cylinder head
  - provides a smooth surface on injector seat
- 1 extension bar with quick-action chuck for brushes
- 6 injector bore sealing plugs for sealing the combustion chamber during the cleaning process
- 1 mounting / disassembly rod for inserting / removing the sealing plug
- 1 steel wire brush for cleaning nozzle holes in the cylinder head

Item #
9324



## Glow Plug Shaft Cleaning Brush

- for professional cleaning of the glow plug shaft
- cleaning of the shaft is recommended before installation of new glow plugs
- steel brush length: 105 mm, Ø 9 mm
- length: 310 mm

Item #
8561





## Injector Extractor Set | for BMW Petrol Direct Injection

- allows easy removal of injectors and is required for installing fuel injector seals on e.g. following engines:
  - BMW N54 (6-cylinder), N63 (V8)
  - MINI N14 (4-cylinder), N18 (4-cylinder)
- sliding hammer with adaptor
- long bolt, 120 mm length
- short bolt, 70 mm length
- tapered cone, to be used as OEM 130195
- assembly sleeve with large diameter, to be used as OEM 130192
- assembly sleeve with medium diameter, to be used as OEM 130193
- assembly sleeve with small diameter, to be used as OEM 130194



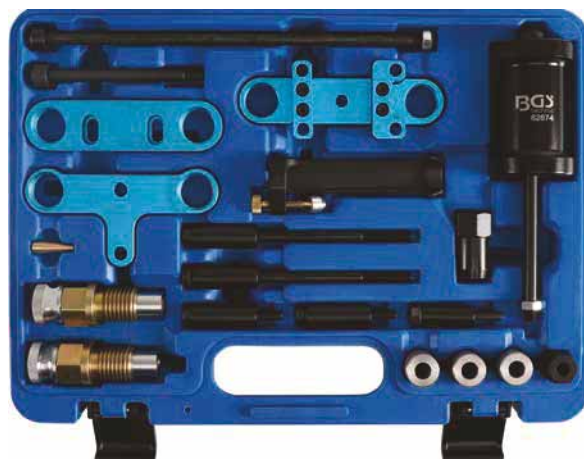
Item #		
9017		

## Fuel Injector Nozzle Tool Set | for BMW

- for removing / installing fuel injectors
- required for installing new injector seal rings and injectors

### suitable for the following BMW models:

- 135is (2008-2010)
- 335 (2007-2010)
- 335xi (2007-2010)
- 535i (2008-2010)
- 535xi (2008-2010)
- 550i GT (2010-2013)
- 750i (2009-2013)
- 750Li (2009-2013)
- X3 3.0i (2007-2010)
- X5 (2011-2013)
- X5 3.0i (2008-2010)
- X6 (2008-2013)
- petrol injector tool for BMW N53 / N54 to be used as OEM 130180
- petrol injector tool for BMW N55 to be used as OEM 130270
- petrol injector tool for BMW N20 / N55 to be used as OEM 130320
- petrol injector tool for BMW N63 to be used as OEM 2249115
- injector tool, to be used as OEM 135250
- injector seal ring mounting tool set, to be used as 130190 / consisting of the following three tools:
  - injector seal ring mounting sleeve (Ø big), to be used as OEM 130192
  - injector seal ring mounting sleeve (Ø middle), to be used as OEM 130193
  - injector seal ring mounting sleeve (Ø small), to be used as OEM 130194
  - injector seal ring mounting cone, to be used as OEM 130195



Item #
62674

## Fuel Injector Tool for BMW

- for removing and mounting of fuel injector nozzles
- suitable for BMW inline cylinder turbo charged engines with direct injection from 2009
- to be used as BMW OEM 130270



Item #
62671

## Injector Alignment Tool for Ford Duratorq | 2 pcs.

- for aligning the injectors to the fuel lines
- it is essential to have the injectors correctly aligned to avoid the risk of a fractured pipe
- suitable for Ford Duratorq engines 2.0 / 2.2 / 2.4 DI / TDCI / TDDI, built in Ford Mondeo 2000-2007 / Ford Transit 2000-2006 / Jaguar X-Type
- metal bar allows aligning of two injectors at the same time, to be used as OEM 303-678
- adjustable tool for aligning injectors, to be used as OEM 303-711



Item #
8884



## Injector Puller | for Chrysler 2.5 & 2.8 CRD

- for extracting burnt and tightly stuck injectors
- suitable for Chrysler 2.5 / 2.8 CRD 16-valve VM engines



Item #
8771



## Injector Sealing Plug Set | 12 pcs.

- for sealing the injector prior to pressure loss test on the engine
- protects the injector from contamination and adhesion when the fuel line is removed
- 6 lock nuts M12 x 1.50 (with inside sealing cone)
- 6 lock nuts M14 x 1.50 (with inside sealing cone)
- for Opel, Mazda, Ford, Mercedes-Benz and others
- for injectors from: Siemens, Bosch, Denso, Delphi



Item #
9540

## Tool Tray 1/6: Thread Repair Kit | for Injector Fastening Screws | 10 pcs.

- suitable for Mercedes-Benz CDI engines
- for reaming the broken-off expansion bolt & repairing the M6 thread in the cylinder head
- time saving as the replacement of the cylinder head and the removal of injectors and valve covers is not necessary
- damaged thread is reworked to size M8 x 1
- 1 twist drill 6 mm, with adjusting ring for drilled depth
- 1 step drill 7 to 8 mm, with adjusting ring for drilled depth
- 1 guide sleeve for 6 mm twist drill
- 1 tap M8 x 1
- 1 assembly tool for threaded inserts
- 5 threaded inserts, inner thread M6 x 1 / outer thread M8 x 1

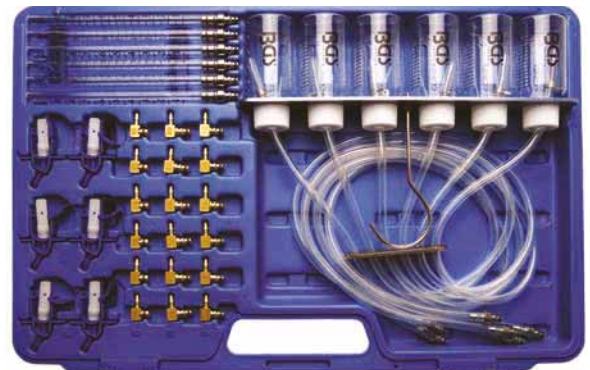


Item #
9538



## Common Rail Diagnosis Kit | with 24 Adaptors

- flow back volume can be determined via glass tubes or measuring cups
- determination of the runback volume via glass tubes or measurement cartridges
- for common rail engines, up to 6 injector nozzles
- suitable for various injector brands
- includes 24 adaptors for Denso C3, C1, Siemens C3, Delphi, Bosch

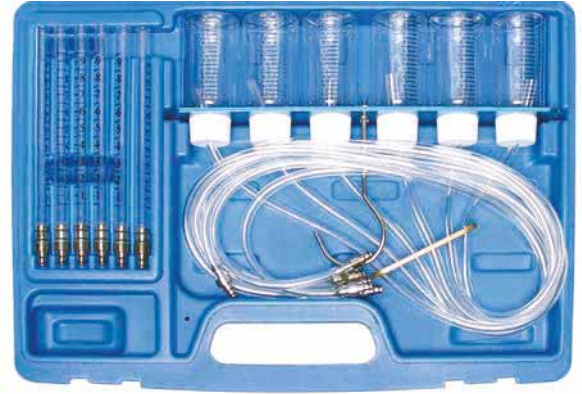


Item #
8102



## Common Rail Diagnosis Kit

- flow back volume can be determined via glass tubes or measuring cups
- determination of the runback volume via glass tubes or measurement cartridges
- suitable for various injector brands



Item #	Description
8101	Common Rail Diagnosis Kit
8101-1	Replacement Tubes with Adaptor   for BGS 8101   6 pcs.
8101-2	Plastic Bottle for BGS 8101, 8102
8101-LEER	Empty Case for BGS 8101

## Adaptor for BGS 8101 | for Bosch, Denso, Siemens (Common Rail Diesel)

- to be used on injector nozzles together with common rail diagnosis kit BGS 8101
- addaptors fit all systems such as Siemens, Bosch, Denso etc.



Item #
8103

## Injector Nozzle Tester

- tester contains gas canister, hand lever and pressure gauge with rubber protection
- for testing of injector nozzles
- suitable for all diesel injector nozzles (except CDI pump-injector elements)
- several characteristics of the injector nozzles can be tested:
  - opening pressure
  - spraying pattern
  - tightness of the nozzle
  - gas spraying pattern
  - acoustic control (sound pattern)
- pressure gauge up to 400 bar
- connecting hose and 3 adaptors included M12 x 1.5 mm, M14 x 1.5 mm and M17 x 0.75 mm
- large base with adaptation
- fuel tank made of plastic with integrated fine filter



Item #
62655

## Injector Nozzle Tester

- for precise adjusting of the injection pressure and for checking the opening pressure of the nozzles, spraying shape, tightness
- includes two adaptors M12 x 1.5 & M14 x 1.5 and gauge up to 600 bar




Item #	Description
62650	Injector Nozzle Tester
62650-1	Plastic Container with Cover   for BGS 62650
62650-2	Connector for BGS 62650   M12 x 1.5
62650-3	Connector for BGS 62650   M14 x 1.5

## Pliers Set for Loosening Fuel Line Connectors | 3 pcs.

- suitable for Fiat, Ford, Opel, Peugeot, Renault, Citroen, VW



Item #	
8012	

## Fuel Line Pliers | 230 mm

- for opening and closing fuel line clutches
- for removal and replacement of hose clip connections on in-line fuel filters
- a must-have when changing the fuel filter unit and repairing the engine
- used for Volkswagen VW-Audi, Fiat, GM, Opel, Mercedes-Benz (e. g. M class petrol engine) etc.




Item #	
8260	 

## Release Pliers for Fuel Pipes and Fuel Filters on VW, Fiat, Opel etc.

- for quick and easy separating of gasoline quick locks
- suitable for quick coupler fuel filters and similar connections
- for all quick coupler that are separated by pressure on the outer ring
- electroplated surface
- handle dip coated



Item #	
8274	

## Removal Pliers for Fuel Lines

- for connections with rest tongues, such as those between fuel line and fuel filter
- suitable for VW, Audi, Volvo, Citroën, Fiat, Alfa and others
- angled head allows work in narrow spaces

Item #
66101



## Pliers for Removing Fuel Lines with Quick Couplers

- for removing fuel lines with quick couplers on filter units, and fuel tank breather

### suitable for the following models:

- Fiat, Alfa Romeo, Lancia 1.3, 1.9, 2.4 I Diesel
- Opel Vectra C 1.9, Signum 1.9, Astra H 1.3, Astra H 1.9 Diesel, Corsa C, Combo, Meriva 1.3 Diesel, Corsa B, Astra F, Astra G, Vectra B, Omega B Petrol
- Chrysler Neon 1.8, Stratus 2.0 and 2.5
- Renault passenger cars since 1997

Item #
8314



## Pipe Connector Removing Kit | 22 pcs.

- removing and disconnecting tools for pipe connectors
- for air conditioning, fuel, air and oil pipes
- fits nearly all brands

Item #
8036



## Pipe Connector Loosening Clip Set | 7 pcs.

- for pipes Ø 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8"
- for quick connecting sleeves in air conditioning systems and fuel lines
- on PVC display board

Item #
8009



## Fuel Pipe Wrench Set | for BMW | 2 pcs.

10  $\square$   $\frac{3}{8}$  12.5  $\square$   $\frac{1}{2}$

- required when disassembling / assembling injection nozzles
- especially designed for BMW engines N54, N63 and S63, also suitable for many other vehicle models
- compact design for use in confined spaces
- side opening allows 180 degree rotation
- includes the following socket sizes:
  - socket, 12-pt, slotted, 17 mm, 12.5 mm (1/2") drive
  - socket, 12-pt, slotted, 14 mm, 10 mm (3/8") drive



Item #
9461



## Fuel Line Tool for MINI Cooper

- for loosening the low pressure fuel feed line that supplies the high pressure fuel pump

### suitable for following MINI Cooper S models:

- Clubman, JCW (R55), engine N14/18 (2008-03.2012)
- Hatchback, JCW (R56), engine N14/18 (2007-03.2012)
- Convertible, JCW (R57), engine N14/18 (2009-03.2012)
- Coupe, JWC (R58), engine N14/18 (2012-03.2012)
- Roadster, JWC (R59), engine N14/18 (2012-03.2012)
- Countryman, JWC (R60), engine N18 (2011-03.2012)
- to be used as OEM 130250



Item #
9153



## Fuel Line Disconnecting Tool | for BMW

- facilitates the separation of fuel line connections
- made of anodised aluminium
- suitable for 3-series built during 1999 to 2005 and X5



Item #
66150



## Tank Sensor Wrench, adjustable | 24 mm Drive

- all-purpose, adjustable from 75 to 160 mm
- for removing and tightening the plastic ring on fuel tank sender units



Item #
1001





## Spanner Set for Fuel Tank Senders

- for assembly and disassembly of the plastic retaining rings of the fuel tank sender unit
- 5 different shaped pairs of clamping arms allow use on a variety of fuel tanks
- can be used for diameters of 75-160 mm, 80-122 mm and 110-170 mm
- can be used with 2 and 3 arms
- 24 mm drive



Item #
8355

## Tank Sensor Wrench, adjustable | 12.5 mm (1/2") Drive

**12.5**  **1/2**

- all-purpose, adjustable from 80 to 199 mm
- suitable for most models of Mercedes, BMW, Audi, Volkswagen, Citroen, etc.
- for removing and tightening the plastic ring on fuel tank sender units



Item #
9376

## Universal 3-Arm Tank Sensor Wrench | 89 - 170 mm

- for loosening and tightening the mounting ring on tank sensors
- allows working in tight spaces
- diameter: adjustable from 87 to 170 mm
- drive 19 mm hexagon



Item #
9063

## Tank Sensor Wrench for VAG

- for dismantling of tank sensor units
- special profile with 99 mm diameter
- length: 390 mm



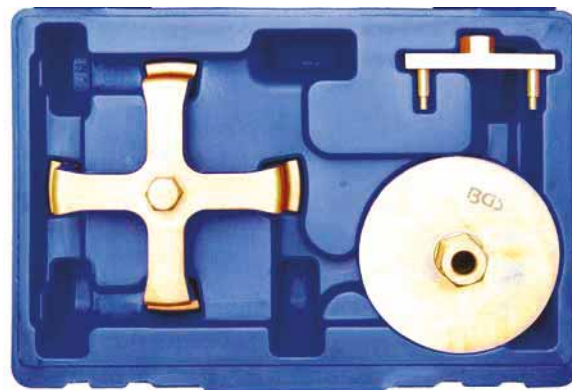
Item #
8535

## Fuel Tank Wrench Set for Mercedes-Benz

- for loosening and tightening the fuel sensor

### scope of delivery:

- Mercedes-Benz 129, 140, 230
- Mercedes-Benz 163, 203, 209, 211, 219
- Mercedes-Benz 202, 208



Item #
8749

## Tool for Fuel Sensor Retaining Ring on VAG and Porsche

12.5  1/2

- for removing and installing the locking ring on tank level sensors
- 120 mm internal diameter with 3 slotted teeth
- to be used as OEM T10202 (3087)

### suitable for following models as of year 2000:

- Audi A3, A4, A6, A7, A8, Q3, Q7, R8, TT
- VW Polo, Beetle, Golf, Golf Plus, Jetta, Eos, Scirocco, Passat, Passat CC, Sharan, Touran, Tiguan, Touareg, Phaeton, Caddy, Transporter
- Porsche Cayenne
- 12.5 mm (1/2") drive



Item #
8969

## Spline Socket for Mercedes Diesel Engine Injection Pumps | 33 teeth

12.5  1/2

- for assembly and disassembly of the injector pump

### suitable for the following Mercedes-Benz engines:

- OM 601 2.0 l / 2.2 l / 2.3 l
- OM 602 2.5 l / 2.9 l
- OM 603 3.0 l / 3.5 l
- OM 605 2.5 l
- OM 606 3.0 l
- OM 615 2.0 l / 2.2 l
- OM 616 2.4 l
- OM 617 3.0 l

- length: 56 mm



Item #
5350



## Special Socket for Diesel Filters | 27 mm

12.5 1/2

- hexagon model
- overall height: 44 mm
- milled, 17 x 20 mm
- suitable for 2.0/2.2 HDI engines on Citroen, Ford, Lancia, Land Rover, Volvo, Peugeot

Item #
8630



## Diesel Filter Removal Tool Kit | for Opel / Fiat

- prevents damage to the fuel filter housing
- clamping device for clamping the filter housing in a bench vice
- special wrench allows easy disassembly of the housing cover
- suitable for:
  - Opel engines DA13, Z13DT, Z13DTH, Z13DTJ, Z19DT, Z19DTL, Z19DTH (not for Corsa-D and Meriva as of 2007)
  - Fiat-/Lancia engines 1.3 16V MJTD, 1.3 16V JDT, 1.9 8V JTD, 2.0 8V JDT, 2.2 16V JTD, 2.3 16V JDT, 2.8 JTD 3.0 16V JDT (only for vehicles with fuel filter insert)

Item #
8553



## Fuel Filter Wrench

10 3/8

- diameter 109 mm
- especially designed for installing and removing Citroen, Peugeot and Renault fuel filters

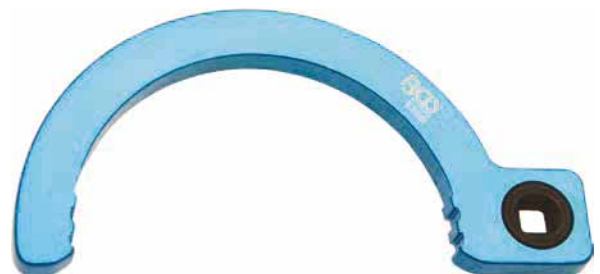
Item #
8416



## Special Wrench for Fuel Filters on HDI Engines

- suitable for Peugeot, Renault, etc., with HDI engines
- 10 mm (3/8") drive
- for filter caps with Ø 108 mm with 46 grooves

Item #
8290



## Diesel Fuel Filter Wrench for Volvo

10 3/8

- for removing and installing fuel filters on Volvo Diesel engines
- suitable for
  - Volvo C30, C70, S40, S60, S80, V50, V60, V70, XC60, XC70, XC90
  - VW Crafter 5-cylinder diesel since 2006
- 10 mm (3/8") drive
- to be used as OEM Volvo 9997084, VW T50011



Item #
9021



## Fuel Filter Tool for Diesel JTD / CDTi / DDiS / TiD / VCDi / Hdi

- for changing the fuel filter insert on Chevrolet, Citroen, Fiat, Saab, Suzuki, Opel
- with following engines:
  - 1.3 JTD / CDTi / DDiS
  - 1.9 JTD / CDTi / TiD
  - 2.0 VCDi / HDi / JTD
  - 2.2 HDi / JTD
  - 2.8 HDi / JTD
  - 3.0 HDi / JTD



Item #
8935

## Diesel Filter Wrench for VW 2.0 TDI

- special design for renewing of the diesel filter on Audi / VW / Skoda / Seat 2.0l TDi
- material: chrom molybdenum steel/S45C steel
- surface finish: satin chrome plated



Item #
8870

## Fuel Filter Tool for VAG 1.4 / 1.9 / 2.0 TDI

- required for assembling the fuel filter housing cover when e. g. replacing the filter cartridge
- ensures an equal and distortion-free pressing of the housing cover into the sealing seat
- when assembling the filter cover without this tool there is the danger that the filter cap twists and the filter unit is leaking
- suitable for Audi, VW, Seat, Skoda diesel vehicles with UFI fuel filter unit



Item #
9212



## Nozzle Gauge | 0.45 - 1.50 mm | 20 pcs.

- to check nozzles for damage
- Ø 0.45 - 0.50 - 0.55 - 0.60 - 0.65 - 0.70 - 0.75 - 0.80 - 0.85 - 0.90 - 0.95 - 1.00 - 1.05 - 1.10 - 1.15 - 1.20 - 1.25 - 1.30 - 1.40 - 1.50 mm

Item #
3041



## Carburetor Screwdriver with Drive Shaft

- facilitates the adjustment of carburettor kits, particularly suitable for work in tight spaces such as motorcycles
- suitable for slotted screws
- slot size: 1 x 5 mm
- adjustable depth stop 0 - 5.5 mm
- marked, lockable knurled sleeve for detecting the range of rotation
- length: 470 mm

Item #
4842



## Diesel Bleeding / Primer Kit | 12 pcs.

- for bleeding the low pressure side on diesel fuel systems
- is required when renewing diesel filters and pumps or other components of the diesel injection system
- prevents defects of high pressure pumps (CDI) which frequently occur during renewing filters without manual filling
- includes 6 different adaptor hoses and hand pump with valve
- suitable for vehicles of the following brands: Ford, PSA, Opel, Fiat, Rover, Land Rover, Renault, Mercedes-Benz

Item #	Description
8819	Diesel Bleeding / Primer Kit   12 pcs.
8819-1	Tool Tray, empty: for BGS 8819



## Hose / Tube Connector Kit for Bleeding Diesel Systems

- for bleeding / filling of diesel injection systems
- suitable for hose / pipe connections
- to be used with e. g. BGS 8080, 8066, 3157, 3155
- 90° angled coupling
- straight coupling
- rubber pipe connector
- straight coupling adaptor

Item #
8066-2



## Socket Set for Bosch Distributor Injection Pumps | 5 pcs.

12.5 ■ 1/2

- is required when replacing, setting, disassembling and assembling Bosch diesel distributor injection pumps
- suitable for 3-point screw heads
- socket for EDC pump covers (1996-2003) on Bosch VP 37 distributor pumps
  - 6.3 mm (1/4") drive / external hexagon 15 mm socket, 3-point, 7 mm
- socket for Bosch distributor injection pumps (Bosch OEM No. 098661750)
  - 6.3 mm (1/4") drive - external square 12.5 mm (1/2") socket, 3-point, 12.6 mm
- socket for cover screws on distributor pumps
  - 12.5 mm (1/2") drive socket, 3-point, 13 mm
- socket for central screw (high pressure side) on Bosch VE and VP distributor pumps
  - 12.5 mm (1/2") drive socket, 3-point, 26 mm
- socket for pressure control valves on Bosch VP37 distributor pumps
  - 12.5 mm (1/2") drive with 2 surfaces, 12.4 mm



Item #
9175



## Socket Set for Bosch Distributor Injection Pumps

12.5 ■ 1/2

- is required when replacing, setting, disassembling and assembling Bosch Diesel distributor injection pumps
- socket, 3-pt., 14 mm, for cover screws on distributor pumps, 12.5 mm (1/2") drive
- socket, 3-pt., 26 mm for central screw (high pressure side) on Bosch VE and VP distributor pumps, 12.5 mm (1/2") drive
- socket, with 2 areas, 12.4 mm pressure control valve on Bosch VP37 distributor pumps drive, 12.5 mm (1/2") drive



Item #
8827



## Sockets for Bosch Injection Pumps | 3-pt | 7 / 12.6 mm

- for loosening the triangle head screws in the flow controller cover
- suitable for Bosch common rail and TDI injection pumps
- sizes: 7 and 12.6 mm

Item #
8953



## CNG Cylinder Valve Wrench

- for disassembly of gas cylinder valves

Item #	Description
64200	CNG Cylinder Valve Wrench for Fiat Multipla I
64201	CNG Cylinder Valve Wrench for Fiat Multipla II, Punto / Citroen C3
64203	CNG Cylinder Valve Wrench for Opel Zafira II, Combo
64204	CNG Cylinder Valve Wrench for Citroen C3 (small Valve)
64205	CNG Cylinder Valve Wrench for Citroen C3 (large Valve)
64206	CNG Cylinder Valve Wrench for Fiat Panda, Grande Punto
64207	CNG Cylinder Valve Wrench for VW Touran, Caddy, Passat
64208	CNG Cylinder Valve Wrench for Type NGT
64202	CNG Cylinder Valve Wrench for Opel Zafira I



## Alternator Tool Set | 30 pcs.

10  $\frac{3}{8}$  125  $\frac{1}{2}$

- for removing belt pulleys on alternators
- includes special bits, wrench and bit sockets
  - socket for 3-hole bolts, hole 28 mm, 3x 4 mm pins, 38
  - socket for 4-hole bolts, hole 26 mm, 4x 4 mm pins, 15
  - internal hexagon sockets with a through-hole for counterholding bits: 15 x 28 - 19 x 28 - 20 x 28 - 22 x 28 - 22 x 22 - 17 x 17 - 22 x 28 mm
  - multi-point sockets with a through-hole for counterholding bits: 33Z x 15 mm - 33Z x 17 mm - 33Z x 22 mm
  - bit sockets T-Star (for Torx) with 12.5 mm (1/2") drive: T50 x 200 mm - T50 x 145 mm
  - bit sockets internal hexagon (for Torx) with 12.5 mm (1/2") drive: M10 x 200 mm - M10 x 145 mm
  - bits 75 mm long, 10 mm drive: T-Star (for Torx) T40 - T50, spline (for XZN) M8 - M10, internal hexagon 8 mm - 10 mm
  - 12 mm ratchet wrench
  - bit sockets to be used with ratchet wrenches T50 x 65 mm, spline (for XZN) M10 x 65 mm
  - 12.5 mm (1/2") drive bit sockets: T50 x 115 mm - spline (for XZN) M10 x 115 mm with 33-tooth attachment
  - 10 mm (3/8") drive bit socket: spline (for XZN) M10 x 90 mm



Item #	Description
4248	Alternator Tool Set   30 pcs.
4248-4	33-tooth Attachment   external Hexagon Drive   for BGS 4248   15 mm
4248-2	Special Bit for Dismantling Belt Wheels on Alternators   T-Star (for Torx) M50 x 64 mm
4248-3	Special Bit for Dismantling Belt Wheels on Alternators   Spline (for XZN) M10 x 64 mm

## Alternator Bit and Socket Set | 23 pcs.

- special bit set with alternator combination sockets (also for air conditioning compressors), for assembly and disassembly of the freewheel pulley
- multi-tooth 15 mm, 33 tooth, Ø17.5 mm socket
- multi-tooth 15 mm, 33 tooth, Ø19.5 mm socket
- multi-tooth 22 mm, 33 tooth, Ø19.5 mm socket
- adapter for pulley wrench, 19 mm and 28 mm
- adapter for pulley wrench, 22 mm and 28 mm
- 3-pin adapter, external hex drive 38 mm
- 4-pin adapter, external hex drive 17 bits, length 70 mm, hexagon 10 mm drive, hexagon H10 mm
- bits, length 75 mm, external hexagon drive 10 mm (3/8"), hexagon socket 8 and 10 mm, bits length 75 mm, external hexagon drive 10 mm (3/8"), spline (for XZN) M8 and M10
- bits, length 75 mm, external hexagon drive 10 mm (3/8"), T-star (for Torx) T40 and T50 bit adapter with retaining ball, square 12.5 mm (1/2") drive hexagon socket 10 mm (3/8") bit socket for alternator, external hex drive 12 mm, spline (for XZN) M10
- bit socket, length 90 mm, 10 mm (3/8") drive, spline (for XZN) M10
- bit socket, length 110 mm, 12.5 mm (1/2") drive, spline (for XZN) M10
- bit socket, length 140 mm, 12.5 mm (1/2") drive, spline for XZN) M10
- bit socket, length 110 mm, 12.5 mm (1/2") drive, T-star (for Torx) T50
- Special insert, external hex drive 17 mm
- special socket, external hex drive 21 mm
- special socket, external hex drive 22 mm and 28 mm
- incl. adapter for BMW, Fiat, Ford, Mercedes-Benz, Opel / Vauxhall, Porsche, Renault, Toyota, VAG etc.



Item #
4247





## Alternator Bit/ Bit Socket Set | 12.5 mm (1/2") | 13 pcs.

12.5 1/2

- special bit set with alternator combination wrenches (also air conditioning compressor) for assembling belt pulleys
- spline pulley key, 15 mm, 33 teeth, bored
- spline pulley key, 22 mm, 33 teeth, bored
- adapter for pulley wrench 22 and 28 mm
- 4-pin adapter, 17 mm drive
- bits, length 75 mm, external hexagon 10 mm (3/8") drive, internal hexagon H8 and H10 mm
- bits, length 75 mm, external hexagon 10 mm (3/8") drive, spline (for XZN) M8 - M10
- bits, length 75 mm, external hexagon 10 mm (3/8") drive, T-Star (for Torx) T40 and T50
- bit socket for alternator, 12.5 mm (1/2") drive, spline (for XZN) M10
- bit socket for alternator, 12.5 mm (1/2") drive, T-Star (for Torx) T50
- bit adaptor with retaining ball, 12.5 mm (1/2") drive - internal hexagon 10 mm (3/8")
- includes adaptors for VW, Audi, Seat, BMW, Mercedes-Benz, Ford



Item #	Description
4246	Alternator Bit/ Bit Socket Set   12.5 mm (1/2")   13 pcs.
4246-LEER	Empty Case for BGS 4246

## Alternator Tool Set | 4 pcs.

- for disassembly of alternators
- T-star (for Torx) bit T50, 64 mm long with 12 mm external hexagon and retaining ball
- spline bit M10 (for XZN), 64 mm long with 12 mm external hexagon and retaining ball
- 33 tooth bit with 15 mm external hexagon
- ratcheting ring spanner 12 mm

Item #	CV
4249	



## Alternator Bit Socket | 12.5 mm (1/2") Drive | T-Star (for Torx) T50

12.5 1/2

- for e. g. Mercedes-Benz A-class
- 33 tooth pulley holder
- profile: T-Star (for Torx) T50
- length: 110 mm

Item #	CV
4240	



## Alternator Bit Socket | 12.5 mm (1/2") Drive | Spline (for XZN) M10

12.5 1/2

- for VW, Audi, Skoda, Seat, Porsche BMW, Ford, Mercedes-Benz
- 33 tooth pulley holder
- profile: Spline (for XZN) M10
- length: 110 mm

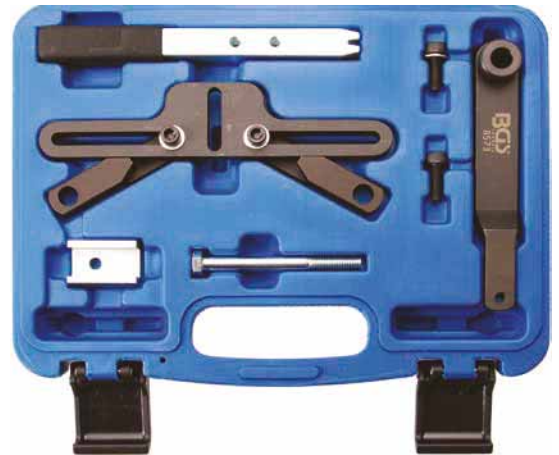
Item #
4245



## Flywheel Locking Tool Set | for BMW

- for locking of the crankshaft
- for locking the flywheel (crankshaft) when loosening the flywheel screws, loosening the crankshaft pulley screws or other jobs where a locking of the crankshaft is required
- suitable for following BMW engines: M47T2, M47TU, M57T2, M57TU, M67, N45, N45T, N46, N46T, N51, N52, N53, N54, W17
- to be used as OEM 118180, 118182, 118183, 118184, 118185

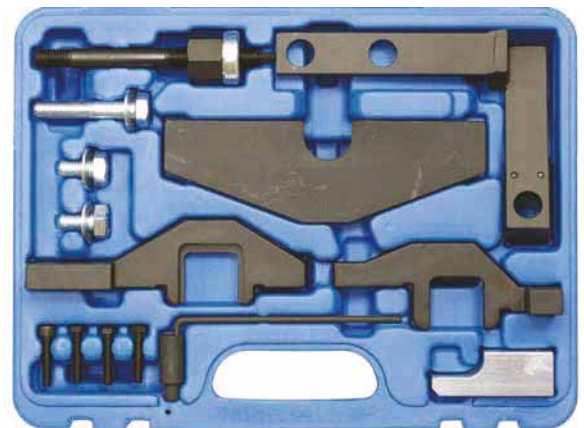
Item #
8573



## Engine Timing Tool Set | for MINI | 13 pcs.

- for engine codes W10, W11, N14
- suitable for following car models: MINI One, Cooper, Cooper S, Cooper S JC Cooper S JCW (series R50-52-53-55-56-57)
- camshaft assembling / disassembling
- crankshaft locking tool, to be used as OEM 119551 and 119552
- crankshaft locking tool, to be used as OEM 119590
- chain tensioner tool to, be used as OEM 119340

Item #
62618



## Engine Timing Tool Set | for BMW, MINI, PSA

- for aligning the new and old version of balance shafts
- prevents noncircular engine running by misaligned balance shafts
- is required when renewing timing chain, crankshaft sealing ring, replacing the cylinder head gasket, etc.

### suitable for the following models:

- BMW 1.6 (N40 / N45 / N45T, B16, B16A, B16AC) 1.8 / 2.0 (N42 / N46 / N46T) 2.0 / 3.0 (N51 / N52 / N52-Component / N53 / N54)
- PSA 1.4 / 1.6 16V (EP3 / EP6 / EP6DT / EP6DTS)
- MINI 1.4 / 1.6 (N12 / N14)
- locking tools for old and new version of balance shaft
- crankshaft locking tool
- locking pin for chain tensioner
- to be used as OEM 115140, 119280, 119330



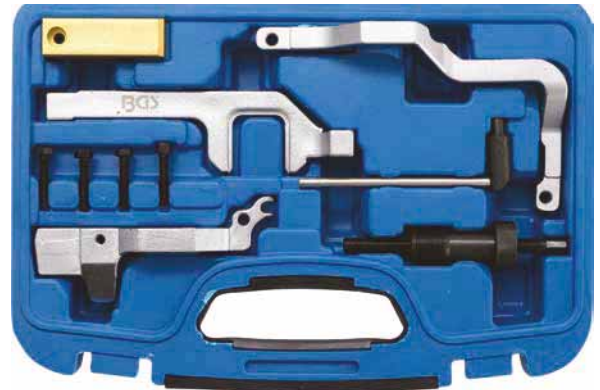
Item #
8710

## Engine Timing Tool Set | for MINI, PSA | 10 pcs.

- is needed for replacing the cylinder head sealing and engine timing

### suitable for the following models:

- MINI One, Cooper HB, Cooper (R55-56) engine N12
- Citroen C4 (manufactured between 2008 and 2009), C4 Picasso (manufactured between 2008 and 2009)
- Peugeot 207 (manufactured between 2006 and 2009), 207CC (manufactured between 2007 and 2009), 308 (manufactured between 2001 and 2009)
- engines: 1.4 / 1.6 VTi, EP3 (8FS) EP6 (5FW), EP6C 1.6 THP, EP6DT (5FX) EP6DTS(5FY)
- crankshaft locking tool to be used as OEM 119590 / 0197-BZ
- camshaft locking tool to be used as OEM 119540 / 0197-A1 / 0197-A3
- chain tensioner to be used as OEM 119340 / 0197-M



Item #
8302

## Engine Timing Tool Set | for BMW M52, M54, M60, M62

- for adjusting and checking the engine timing
- suitable for the following BMW models: 320 E46 - 323 E46 - 325 E46 - 328 E46 - 330 E46 - 520 E39 - 520 E60 - 520 E39 - 523 E39 - 525 E39 - 525 E60 - 528 E39 - 530 E34 - 540 E34 - 535 E39 - 530 E39 - 530 E60 - 728 E38 - 730 E65 - 730 E35 - 730 E32 - 735 E38 - 740 E32 - 740 E38 - X3 E83 - X5 E53 - Z3 - Z4 E85
- camshaft adjusting tool (M52, M54), to be used as OEM 11 6 150
- vanos tool (M52, M54), to be used as OEM 11 3 450
- camshaft adjusting tool cyl. 1-4 (M60, M62), to be used as OEM 11 2 445 / OEM 11 2 441
- camshaft adjusting tool cyl. 5-8 (M60, M62), to be used as OEM 11 2 442 / OEM 11 2 446
- chain tensioner (M52, M54), to be used as OEM 11 4 220
- chain tensioner (M60, M62) to be used as OEM 11 4 230
- crankshaft adjusting tool, to be used as OEM 11 2 300
- adaptor (M52, M54)
- tensioner pin (M60, M62)



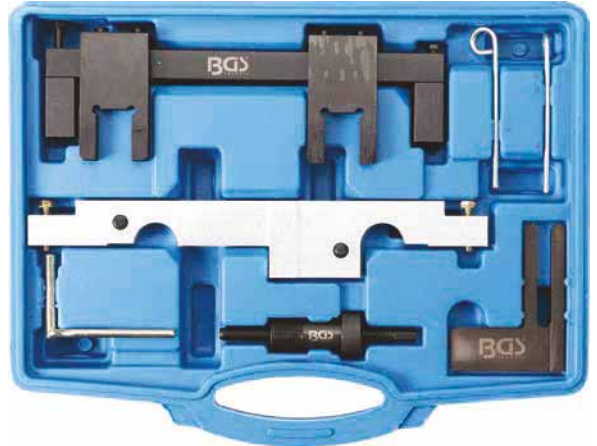
Item #
8534

## Engine Timing Tool Set | for BMW N43

- for checking and adjusting the engine timing

### suitable for the following BMW models:

- 1 (E81 - E82 - E87 - E88) 2006 - 2012
  - 3 (E90 - E91 - E92 - E93) 2006 - 2012
  - 5 (E60 - E61) 2007 - 2010
  - motorcodes: N43 (B16A/AA) - N43 (B20A) - N43 (B20AA) - N43 (B20AY) - N43 (B20KO) - N43 (B20UO)
  - tool for chain tensioner
  - camshaft locking tool
  - balance shaft locking tool
  - crankshaft locking tool
- to be used as OEM 113340 - 118690 - 118691 - 118692 - 118693 - 119340 - 119341 - 119342 - 118710 - 118711 - 118712 - 118700 - 115120



Item #
8570



## Engine Timing Tool Set | for BMW N47, N47S, N57

- for adjusting and checking the engine timing
- is required while dismantling and mounting the camshaft, replacing the timing chain and cylinder head gasket
- suitable for BMW Diesel engines with engine codes N47 - N47S - N57 - N57S, installed in the following vehicles:
  - 116d 118d 120d 123d, series E81 E82 E87 E88 F20
  - 316d 318d 320d 325d 330d series E90 E91 E92 E93 F30
  - 520d 525d 530d 530d GT 535d 535d GT M550d, series E60 E61 F07 F10 F11
  - 640d series F12
  - 730d 740d 750d, series F01
  - X1 1.8d 2.0d 2.3d, series E84
  - X3 1.8d 2.0d 3.0d, 3.5d series E83 F25
  - X5 3.0d 4.0d M5.0d, series E70
  - X6 3.0d 4.0d M5.0d, series E71
- crankshaft turning tool, to be used as OEM 116480
- camshaft locking tool, to be used as OEM 118760
- pump sprocket support sleeve, to be used as OEM 118740 / 118741 / 118742
- crankshaft pulley locking tool, to be used as OEM 115320



Item #
8724

## Double Vanos Adjustment Tool Set for BMW M52TU / M54 / M56

- for setting the vanos units on BMW M52TU / M54 / M56 engines
- VANOS setting tool, to be used as OEM 116150
- pressure connection, to be used as OEM 113450
- secondary sprocket mounting device, to be used as OEM 116180



Item #
8743



## Engine Timing Tool Set | for BMW N62, N73

- for checking and adjusting the engine timing

### suitable for the following BMW models:

- E60, E61, E63, E64, E65, E66, E53
- 540i, 545i, 550i, 645i, 650i, 735i, 740i, 745i, 750i, 760i, X5
- with engines of the series:
  - N62 B40A, B44A, B48B (manufactured between 2003 and 2010)
  - N62 B44A, B48B (manufactured between 2003 and 2010)
  - N62 B36A, B40A, B44A, B48B
  - N73 B60A (manufactured between 2002 and 2008)
  - N62 B44A, B48A (manufactured between 2003 and 2007) Holder to use as OEM 119463
- timing chain tensioner, to be used as OEM 119340
- intake camshaft lock, to be used as OEM 119461
- exhaust camshaft lock, to be used as OEM 119462
- crankshaft lock, to be used as OEM 119451
- wheel segment, to be used as OEM 113460
- spacer, to be used as OEM 119452
- socket, to be used as OEM 119454
- special ring with pointer, to be used as OEM 119453
- crankshaft pin, to be used as OEM 119190



Item #
8746

## Engine Timing Tool Set | for BMW M42, M50

- for adjusting the engine timing after e. g. changing the timing chain or cylinder head gasket
- suitable for BMW engines M42 and M50
- camshaft locking tool
- flywheel locking tool
- to be used as OEM 113240 and 112300

Item #
8747



## Engine Timing Tool Set | for BMW M60 / M62

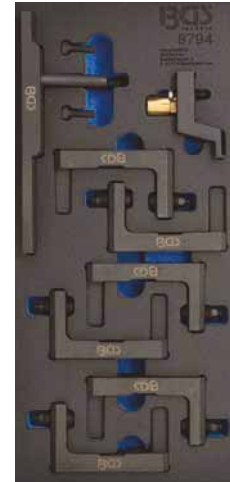
- for adjusting the engine timing after changing the timing chain and cylinder head gasket, for example
- suitable for BMW engines M60 and M62
- camshaft locking tool
- flywheel locking tool
- to be used as OEM 112441, 112442, 112445, 112446, 112300, 113390

Item #
8748



## Camshaft Bearing Cap Tool | for BMW N51 / N52

- for installation of the exhaust camshaft bearing strip
- is used when replacing the camshaft
- to be used in combination with BGS 62619
- press-down tool, 2-cylinder, to be used as OEM 114 461
- 2 M7 screws, to be used as OEM 114 462
- 6 thrust pieces, to be used as OEM 114 463



Item #
8794

## Engine Timing Tool Set | for BMW N42, N46, N46T

- for adjusting / checking the engine timing and vanos unit

### suitable for the following BMW models:

- E81 (116i / 118i / 120i) E87 (118i / 120i)
- E88 (120i) E46 (316i / 316ti / 316i / 318ci / 318ti)
- E90 (318i / 320i) E91 (318i / 320i) E92 (320i)
- E93 (320i) E60 (520i) E83 (X3 2.0) E85 (Z4 2.0)
- pre-tensioning tool, to be used as OEM 119340
- sensor gear alignment tool, to be used as OEM 119350
- inlet camshaft locking tool, to be used as OEM 119292
- exhaust camshaft locking tool, to be used as OEM 119291
- flywheel locking pin, to be used as OEM 115120
- camshaft alignment tool, to be used as OEM 119270
- screw for camshaft locking tool, to be used as OEM 119293
- crankshaft locking tool, to be used as OEM 119190



Item #
8834

## **Engine Timing Tool Set | for BMW, Land Rover V8**

- for adjusting and checking the engine timing
- required for e. g. working on valve drive and renewing the cylinder head gasket

### **suitable for the following models:**

- BMW 530i (1994 - 1995), 540i (1997 - 2003), 740i (1993 - 1995), 740iL (1993 - 2001), 840Ci (1995 - 1996), X5 (2000 - 2003)
- Rover Range Rover with M60, M62 and M62TU V8 engines
- exhaust camshaft locking tool (cyl. 1-4), to be used as OEM BMW 112445 | Rover LRT 12-223/2
- inlet camshaft locking tool (cyl. 1-4), to be used as OEM BMW 112441 | Rover LRT 12-223/1
- inlet camshaft locking tool (cyl. 5-8), to be used as OEM BMW 112442 | Rover LRT 12-223/3
- exhaust camshaft locking tool (cyl. 5-8), to be used as OEM BMW 112446 | Rover LRT 12-223/4
- fixing tools for camshaft locking tools (A-D)
- crankshaft alignment pin to be used as OEM 112300
- timing chain pre-tensioner, to be used as OEM 113390



Item #		1/3
9071		

## **Crankshaft Pulley Holder and Rotating Tool Set | for BMW 2.5D**

- for rotating the diesel engine crankshaft and holding the crankshaft pulley while loosening or tightening the middle pulley bolt
- allows safe and damage-free removing and installation of crankshaft pulleys
- suitable for 2.5 l diesel engines, built in BMW models: 325, 330, 335, 525, 530, 535, 730
- engine codes: M57N256D2, M57306D3, M57306D4, M57306D5, M57D30A, M57N206D3, M57N2306D3, M57N306D2, M57N306D3, M57N306D5, N57N306D2, N57N306D3
- crankshaft pulley holding tool, to be used as OEM 117222, 117223, 117221
- crankshaft rotating tool, to be used as OEM 116480



Item #		1/3
9309		

## **Crankshaft Holding Tool | for BMW N47 / N57**

- for locking the crankshaft
- to be used as OEM 114320
- required when replacing the secondary drive chain
- supplementary tool for engine timing tool set for BMW BGS 8724

Item #
9422





## Engine Timing Tool Set | for BMW 1.6

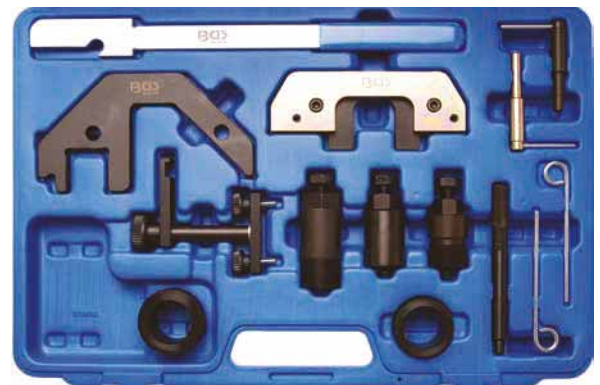
- suitable for timing chain driven petrol engines with vanos, engine codes N40, N45, N45T (B16)
- for the following BMW models: 116 1.6 i E81/ E 87316 1.6 i E46 / E90316 1.6 Ci E46316 1.6 ti E46
- crankshaft timing pin to be used as OEM 119190
- timing chain pre-tensioning tool to be used as OEM 119340, 119341
- camshaft alignment tool (inlet) to be used as OEM 117252
- camshaft alignment tool (exhaust) to be used as OEM 117251
- vanos setting tool, to be used as OEM 117260



Item #
62614

## Engine Timing Tool Set | for BMW Diesel | 13 pcs.

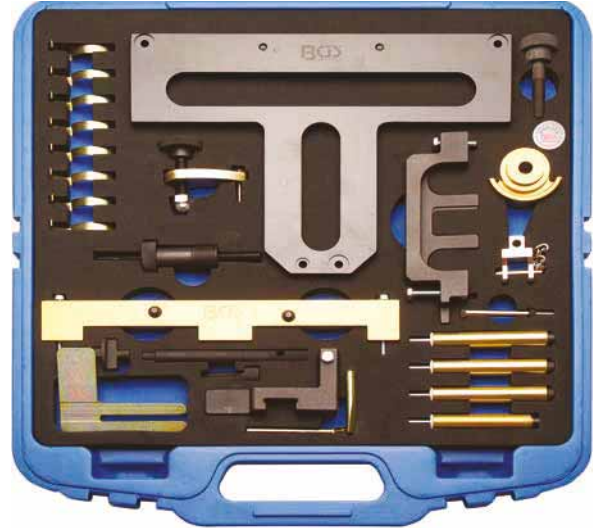
- suitable for the following models:
  - BMW 1, 3, 5, 6, 7, X3, X 5 (E34-36-38-39-66-83-90-91-92-93 series)
  - Landrover Range Rover, Freelander
  - Rover 75, MG, MG ZT
  - Vauxhall / Opel Omega-B
- engine codes:
  - M41, M51, M47 M47 TU/T2, M57 TU/T2 2.0l/3.0l 1998-2008
  - 204D3 / Td4, Td 6
  - M47R
- timing chain counterholder, to be used as OEM BMW 113360 / Range Rover LRT-12-115
- camshaft locking tool, to be used as OEM BMW 116321 (116320) / Opel KM6267
- holder for camshaft locking tool, to be used as OEM BMW 116322 (116320)
- injection pump puller (long), to be used as OEM BMW 135120
- injection pump puller, to be used as OEM BMW 135120 / Range Rover LRT-12-119
- injection pump puller (short), to be used as OEM BMW 135191, 135192 (135190) / Opel KM6270
- threaded ring, to be used as OEM BMW 135191, 135192 (135190) / Opel KM6270
- camshaft locking tool, to be used as OEM BMW 113320 / Rover LRT-12-112
- crankshaft locking pin, to be used as OEM BMW 115180
- crankshaft locking pin, to be used as OEM BMW 116080
- tensioner locking pin, to be used as OEM BMW 113340 / Range Rover LRT-12-114 / Opel KM-823
- crankshaft locking pin, to be used as OEM BMW 112300 / Range Rover LRT-12-108



Item #	Description
62616	Engine Timing Tool Set   for BMW Diesel   13 pcs.
62616-2	Camshaft Locking Tool   for BMW   for BGS 62616

## Engine Timing Tool Set | for BMW Petrol Engines | 26 pcs.

- for engine codes N42, N46, B18/-A, B20/-A/-B
  - suitable for the following models:
    - BMW 1, 3, 5, X3, Z4 (E87-46-60-85-83-90-91 series)
  - for camshaft assembling / disassembling
  - valve timing of camshafts
- 
- clamps for intermediate lever, to be used as OEM 119310
  - bearing bridge holder, to be used as OEM 119320
  - thumbscrew, to be used as OEM 119302
  - eccentric shaft holder, to be used as OEM 119301
  - camshaft locking tool, to be used as OEM 119290
  - camshaft locking tool (inlet), to be used as OEM 119302
  - clamping tool, to be used as OEM 119340
  - spring holder, to be used as OEM 119390
  - camshaft sensor tool, to be used as OEM 119350
  - fastening screw, to be used as OEM 119390
  - camshaft rotation key, to be used as OEM 119270
  - crankshaft locking tool (straight), to be used as OEM 112300
  - mounting bolts 3x, to be used as OEM 119320
  - fastening screw, to be used as OEM 119290
  - camshaft locking tool, to be used as OEM 119290
  - crankshaft locking tool (angled), to be used as OEM 119190
  - mounting bolts, to be used as OEM 119320
  - setting tool for balancer shaft to be used as OEM 119330



Item #	Description
62617	Engine Timing Tool Set   for BMW Petrol Engines   26 pcs.
62617-14	Camshaft Locking Tool   for BMW N42 / N46   for BGS 62617

## Engine Timing Tool Set | for BMW N51, N52, N52K, N53, N54, N55

- for engine codes: N51, N52, N52K, N53, N54, N55
- contains important tools, e. g.: camshaft assembling / disassembling, timing belt change, checking and adjustment of valve timing

### suitable for the following models:

- E60 523i ,523Li, 525i, 525Li, 525xi, 528i,528xi, 530i, 530Li, 530xi, 535i, 535xi
- E61/E63 523i, 525i, 525xi, 530i, 530xi, 535xi, 630i
- E64/E65 630i, 730i
- E66/E70 730Li, X5 3.0Si
- E81/E82 130i, 135is
- E93 325i, 328i, 330i, 335i
- E83 X3 2.5i, 2.5Si, 3.0i, 3.0Si
- E85/E86 Z4 2.5i, 2.5Si, 3.0i, 3.0Si, Z4 3.0Si
- E87/E90 130i ,323i, 325i, 325xi, 328i, 328xi, 330i, 330xi, 335i, 335xi
- E91 323i, 325i, 325xi, 328i, 328xi, 330i, 330xi, 335i, 335xi
- E92 323i ,325i, 325xi, 328i, 328xi, 330i, 330xi, 335i
- flywheel locking tool, to be used as OEM 110300
- camshaft locking tools, to be used as OEM 114280, 114281, 114282, 114283
- camshaft wheel adjusting tool, to be used as OEM 118520
- camshaft wheel adjusting tool, to be used as OEM 112904



Item #
62619

## Engine Timing Tool Set | for BMW N63

- for adjusting the engine timing when replacing timing chain, cylinder head repair, replacing the cylinder head gasket, etc.
- crankshaft locking tool, to be used as OEM 118570 / 119190
- camshaft locking tool, to be used as OEM 119890
- thumbscrew, to be used as OEM 119891
- depressing bar, to be used as OEM 119892
- snap gauge for intake and exhaust camshaft, to be used as OEM 119893
- spacer, to be used as OEM 119894

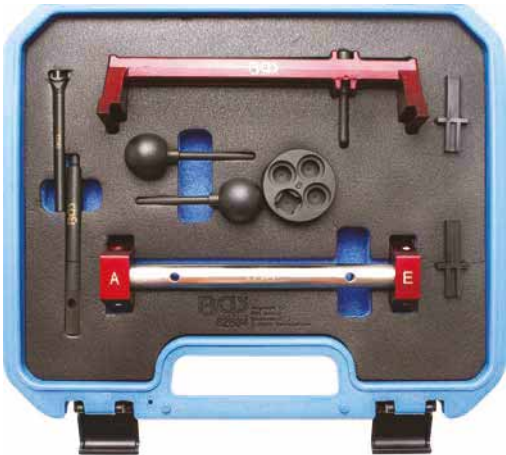


Item #
62627

## Engine Timing Tool Set | for BMW S54 | 8 pcs.

- for checking and setting camshaft timing when installing vanos adjustment unit on S54 engines
- suitable for the following models:
  - BMW M3 convertible (00-06), Sports Coupe (99-06), CSL Sport Coupe (03-04)
- to be used as OEM 119140, 119130119170, 117340, 115100, 17160, 112300, 110480

Item #
62634



## Engine Timing Tool Set | for BMW N20, N26 | 10 pcs.

- for checking and setting camshaft timing when e. g. working on the valve train, renewing the cylinder head gasket, etc.
- suitable for the following BMW models:**
- 320i (F30) (2.0L N20B20) since 2012
  - 328i (F30) (2.0L N20B20) since 2012
  - X1 xdrive20i, sdrive20i (E84) (2.0L N20B20) 2010-2012
- to be used as OEM 83302212831, 83302212830, 83302219548, 119340

Item #	Description
62637	Engine Timing Tool Set   for BMW N20, N26   10 pcs.
62637-1	Empty Case for BGS 62637



## Engine Timing Tool Set | for BMW N13, N18

- for checking and setting camshaft timing when e. g. working on the valve train, renewing the cylinder head gasket, etc.
- suitable for the following BMW models:**
- 114i (F20) (N13B16) since 07/2012
  - 116i (F20) (N13B16) since 09/2011
  - 316i (F30) (N13B16) since 11/2012
  - 118i (F20) (N13B16) since 09/2011
  - 320i EfficientDynamics (F30) (N13B16) since 11/2012
- to be used as BMW OEM 117440, 119340, 496709, 119590, 2299362

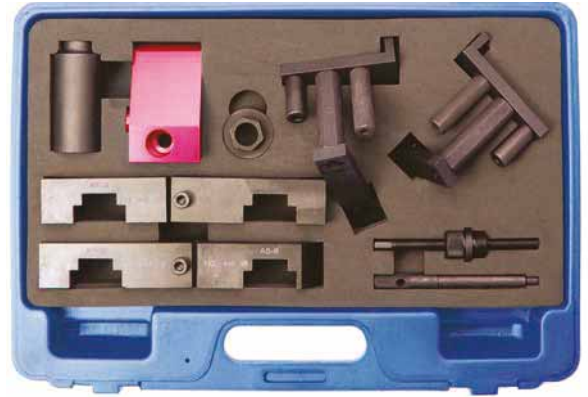
Item #
62672





## Engine Timing Tool Set | for BMW M62 Vanos

- for checking and adjusting the engine timing
- suitable for e. g. following engine series: M62B35 - M62B44 - M62TUB44
- vanos valve socket, to be used as OEM 11 6 42
- chain tensioner tool, to be used as OEM 11 7 380
- rotating tool, to be used as OEM 11 6 440
- transmitter wheel tool set, to be used as OEM 11 6450, consisting of:
  - transmitter wheel tool for cylinder 1 to 4, to be used as OEM 11 6 451
  - transmitter wheel tool for cylinder 5 to 8, to be used as OEM 11 6 452
- camshaft locking tool for cylinder 1 to 4, to be used as OEM 11 2 445 / 11 2 441
- camshaft locking tool for cylinder 5 to 8, to be used as OEM 11 2 442 / 11 2 446
- chain tensioner, to be used as OEM 11 3 390
- crankshaft locking tool, to be used as OEM 11 2 300



Item #
8602

## Tool Tray 1/3: Engine Timing Tool Set | for BMW S65

- for adjusting the engine timing, when replacing the timing chain, cylinder head gasket, etc.
- suitable for following models with S65 engines: BMW M3 E90 / E92 / E93 (>2007) Wiesmann MF4 (>2009)
- camshaft adjusting tool (inlet), to be used as OEM 11 9 971
- camshaft adjusting tool (exhaust), to be used as OEM 11 9 972
- crankshaft locking tool, to be used as OEM 11 5 320
- vanos adjusting tool, to be used as OEM 11 5 370
- chain tensioner locking tool, to be used as OEM 11 5 290
- 6 mounting screws for camshaft adjusting tools



Item #
9458



## Crankshaft Rotating Tool | for BMW M52 / M54 / M56

12.5 1/2

- for holding the crankshaft pulley while loosening or tightening the middle pulley bolt
- allows safe and damage-free removal / installation
- to be used as OEM 116480

Item #
8742





## Belt Pulley Counterholding Wrench | for BMW M52TU / M54 / M56

- for holding the crankshaft pulley while loosening or tightening the middle pulley bolt
- allows safe and damage-free removal / installation



Item #
8744

## Belt Pulley Counterholding Wrench | for BMW M52TU / M54 / M56

- for holding the crankshaft pulley while loosening or tightening the middle pulley bolt
- allows safe and damage-free removal / installation
- to be used with 12.5 mm (1/2") ratchet, sliding T-bar, etc.



Item #
8745

## Balance Shaft Adjusting Tool | for BMW N40 / N42 / N45 / N46

- for adjusting the balancer shaft



Item #
8832

## Fuel Injector Tool | for BMW N20 & N55

- for disassembly and assembly of fuel injectors on gasoline direct injection engines N20 and N55



Item #
8907

## Intermediate Lever Spring Tool | for BMW

- for disassembly and assembly of pressure springs on the valve intermediate lever
- suitable for BMW engines N20, N51, N52, N52K, N52T, N55
- ensures quick, easy and safe handling of these high-force springs
- to be used as OEM 114270



Item #
8921

## Water Pump Holder | for BMW M60, M62, M62TU

- for holding the water pump hub during removal of the fan clutch
- each side of the tool is applicable to different models
- side 1 for engine M60 / M62 / M62TU [V8]
- side 2 for engine M10 / M20 / M30 (32 mm fan clutch)



Item #
9223

## Assembly Tool for injection Pump wheel | for BMW

- holds the sprockets during the assembly of the injection pump
- suitable for BMW engines M47 / M47T2 / M47TU / M57 / M57TU
- suitable for series: E46 (318D-320D) (1988 - 2005) and E60, E61 (318TD-320TD-525D-530D-530-535) (2000 - 2006)

Item #
62050



## Timing Chain Pre-Tensioning Tool | for BMW N63

- is required when setting the engine timing
- an adjustment of the engine timing without this tool may lead to incorrect setting
- to be used as OEM 119900

Item #
62626



## Balance Shaft Adjusting Tool | for BMW N20

- for fixing the balancer shaft and holding chain sprocket
- to be used for repairing the chain and sprocket wheel drive

- 1 balancer shaft locking pin to be used as OEM 2212825
- 1 chain sprocket holder to be used as OEM 2318117
- 2 screws PH3 M6 x 1,0 hex drive size 10 (length: 26mm)



Item #
9442

## Engine Timing Tool Set | for Chrysler 2.5 CRD

- for setting and checking the engine timing

### suitable for the following models:

- Chrysler Voyager, Grand Voyager R2516C, R2516L, R2816K engines
- Jeep Cherokee (2001 - 2008) 2.5 / 2.8 engines
- LDV Maxus (2005 - 2008) VM2516L engines
- camshaft locking pin (inlet) to be used as OEM VM1052
- camshaft locking pin (exhaust) to be used as OEM VM1053
- flywheel locking pin (Voyager, Grand Voyager 2.5 / 2.8 and LDV Maxus) to be used as OEM VM1068 / VM1089
- flywheel locking pin (Jeep Cherokee 2.8) to be used as OEM VM1080
- flywheel locking pin (Jeep Cherokee 2.5) to be used as OEM VM8873
- tensioner wrench to be used as OEM VM9660
- balancer shaft locking pin
- flywheel locking pin



Item #
8500

## Engine Timing Tool Set | for Chrysler, Jeep, Dodge 2.8l Diesel

- for checking / setting the engine timing

### suitable for the following Chrysler models:

- Grand Voyager
- Jeep Cherokee
- Wrangler
- Dodge Nitro
- engine codes: VM64C, ENS, ENS (51C), 49C, 50C, ENS VM10D, ENS VM11D
- camshaft locking tool, to be used as OEM VM9991
- crankshaft locking tool, to be used as OEM VM9992



Item #
9379

## Engine Timing Tool Set | for Mercedes-Benz / Chrysler

- includes tools for adjusting the camshaft and locking the crankshaft (flywheel)

### suitable for the following models:

- Mercedes-Benz 190 / C / CLK / E / S / SL / SLK / G / M / Vito / Sprinter / Viano / PT Cruiser / Grand Cherokee

### petrol engines:

- 1.8 / 2.0 / 2.2 / 2.3 / 2.5 / 2.8 / 3.0 / 3.2 / 3.3 / 4.2 / 5.0 / 6.0
- with engine codes 102 / 111 / 104 (except for AMG) / 119 / 120

### diesel engines:

- 2.0D / 2.2D / 2.3D / 2.5D / 2.5DT / 2.9D / 2.9TD / 3.0D / 3.0DT / 3.5D / 3.5DT / 2.0 CDi / 2.2 CDi / 2.3 CDi / 2.7 CDi / 3.2 CDi / 3.5 CDi / 3.9 CDi / 4.0 CDi / 2.2 CRD / 2.7 CRD
- with engine codes 601 / 604 / 605 / 611 / 646 / 612 / 602 / 603 / 606 / 612 / 613 / 646 / 647 / 648 / 628 / 603 / 613 / 628 / 648 / 646 / 602 / 603 / EDJ
- flywheel locking tool, incl. 2 x M6 x 90mm bolts, to be used as OEM 601589024000, 8933
- flywheel locking tool, to be used as OEM 112589034000
- camshaft locking pin set, to be used as OEM 602589004000, 8929



Item #	
9326	 <b>1/6</b>

## Engine Timing Tool Set | for MINI, Citroen, Peugeot 1.6l Diesel

- for checking / adjusting the engine timing

### suitable for the following models with 1.6 diesel engine:

- MINI / MINI Clubman, R55 / R56 / R57 series
- Citroen C2 / C3 / C4 / C5 / Grand Picasso / Berlingo (MK3) / Xsara Picasso
- Peugeot 206 / 206cc / 207 / 207cc / 1007 / 307 / 308 / 308cc / 3008 / 5008 / Partner (MK3)
- engine codes: W16D16 (9HZ), W16D16UO, or 9HZ / 9HX / 9HY (DV6TED4)
- crankshaft locking pin, to be used as OEM PSA 0194A / BMW 119790
- timing pin for camshaft / high pressure pump, to be used as OEM PSA 0194B / BMW 110300
- flywheel holding tool, to be used as OEM 119850 / 119851 / 119852



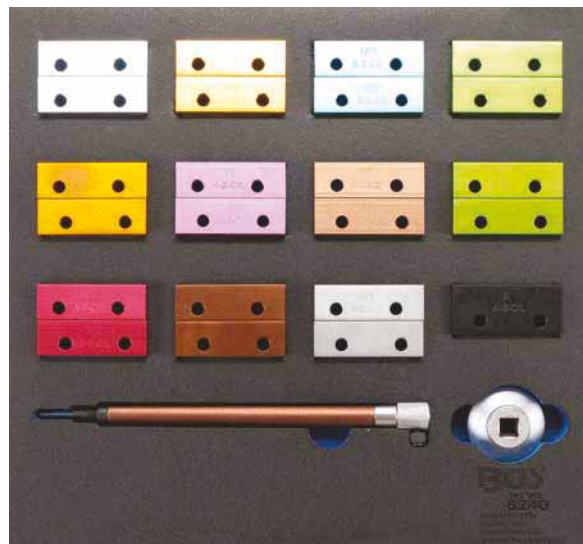
Item #
9214

## Engine Timing Tool Set | for Fiat, Lancia, Alfa Romeo

- special socket, 12.5 mm (1/2") for disassembling the phase adjuster
- 23 custom fit timing tools for inlet camshaft and exhaust camshaft
- prevent distortion of camshafts and allow setting them in mounting position for the timing belt
- locking tools are numbered and have different colours to avoid mix-up
- can also be used for exact positioning of the crankshaft using the TDC setting plug and an optional micrometer (BGS 1938-1, not contained in this set).

### suitable for the following models:

- Fiat Bravo 1.4 12V, 2.0 20V - Brava 1.4 12V, 2.0 20V - Marea 2.0 20V, Coupe 1.8 16V, Barchetta 1.8 16V, Punto 1.8 16V
- Lancia K5 2.0 20V - 4 cyl. VIS engines as of 1996 - Delta 1.8 16V Step A - Dedra 1.8 16V Step A - Y10 1.4 12V
- Alfa Romeo 145 1.4, 1.6 16V Step A - 146 1.4, 1.6 16V Step A - 147 1.6 16V Step A - 147 105 HP - 147 1.6 eco 103 HP - 155 1.4, 1.6 16V Step A - 156 1.6 16V Step A - 156 1.8, 2.0 16V - 156 2.0 JTS - 166 2.0 - GTV 2.0 JTS - Spider GT 2.0 JTS 16V 165 HP
- camshaft locking tool, to be used as OEM 1 825 041 000, 1 825 042 000, 1 860 096 100, 1 860 819 000, 1 860 847 000, 1 860 892 000, 1 860 899 000, 1 870 797 000
- holder for gauge for adjusting piston TDC (gauge is required), to be used as 1 860 895 000, 1 895 879 000, 1 825 013 000
- socket for phase adjuster, to be used as OEM 1 822 110 000, 1 852 161 000

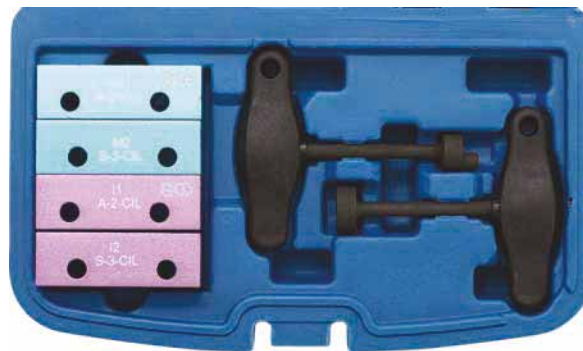


Item #
8240



## Engine Timing Tool Set | for Alfa Romeo 1.4, 1.6, 1.8, 2.0 Twin-Spark

- for adjusting the engine timing during timing belt replacement, cylinder head repair, replacement of the cylinder head gasket, etc.
- suitable for Alfa Romeo models 145 / 146 / 147 / 155 / 156 / 166 / Spider / GTV
- suitable for Twin Spark engines 1.4 / 1.6 / 1.8 / 2.0 l 16V Twin Cam, engine codes 162.01 / 322.01 / 323.01 / 323.10 / 335.03 / 671.06 / 672.04 / 676.01
- timing belt tensioning tool, to be used as OEM 1822149000
- balancer shaft belt tensioning tool, to be used as OEM 1822154000
- camshaft setting tool (purple), to be used as OEM 1825042000
- camshaft setting tool (blue), to be used as OEM 1825041000



Item #
8786



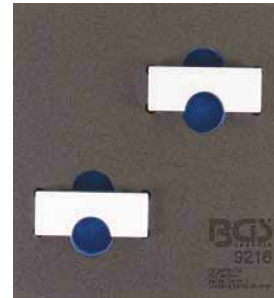
## Camshaft Locking Tool Set | for Alfa Romeo 147 1.6 105 HP

- to check and adjust the camshaft timing
- required when replacing the timing belt

### suitable for:

- Alfa Romeo 147 1.6 105 HP
- inlet and exhaust camshaft locking tool to be used as OEM 1870797000

Item #		1/6
9216		



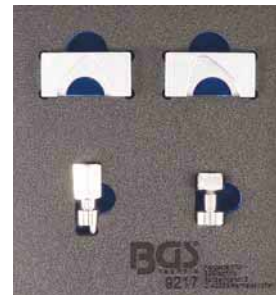
## Camshaft Locking Tool Set | for Alfa Romeo 2.0 JTS

- to check and adjust the camshaft timing
- required when replacing the timing belt

### suitable for Alfa Romeo:

- 156
- GT
- GTV
- Spider 2.0 JTS (165 HP)
- engine codes: 937A1000, 932A2000
- balance shaft clamping tool, to be used as OEM 1822154000
- belt tensioning tool, to be used as OEM 1822149000
- inlet camshaft locking tool, to be used as OEM 1860856001
- outlet camshaft locking tool, to be used as OEM 1860831002

Item #		1/6
9217		



## Camshaft Locking Tool Set | for Alfa Romeo / Lancia 3.0I V6 24V

- for checking / adjusting the engine timing
- to be used as OEM 1825040000

### suitable for:

- Alfa Romeo / Lancia 3.0L V6 24V
- camshaft locking tool for inlet cam cylinder 1
- camshaft locking tool for outlet cam cylinder 1
- camshaft locking tool for inlet cam cylinder 6
- camshaft locking tool for outlet cam cylinder 4

Item #		1/6
9227		



## Camshaft Locking Tool Set | for Alfa Romeo 1.6I 16V

- for checking / adjusting the engine timing
- to be used as OEM 1870734000

### suitable for:

- Alfa Romeo 145/146/147/156 1.6 16V (Step"A")
- camshaft locking tool for inlet cam cylinder 2
- camshaft locking tool for outlet cam cylinder 3

Item #
9264



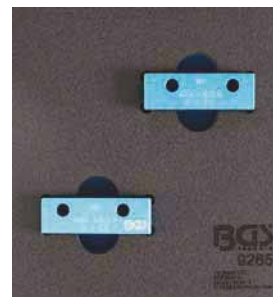
## Camshaft Locking Tool Set | for Alfa Romeo 1.8I / 2.0I 16V

- for checking / adjusting the engine timing
- to be used as OEM 1825041000

### suitable for:

- Alfa Romeo 147 / 156
  - 1.8 16V (140 HP) / 1.8 16V (144 HP)
  - 2.0 16V (150 HP) / 2.0 16V (155 HP)
- camshaft locking tool for inlet cam cylinder 2
- camshaft locking tool for outlet cam cylinder 3

Item #
9265



## Camshaft Locking Tool Set | for Alfa Romeo 2.0I 16V JTS

- for checking / adjusting the engine timing
- to be used as OEM 1870859000

### suitable for:

- Alfa Romeo 147 / 156 / 166 / GTV / Spider GT with 2.0 16V JTS (165 HP) engine
- camshaft locking tool for inlet cam cylinder 2
- camshaft locking tool for outlet cam cylinder 3

Item #
9266



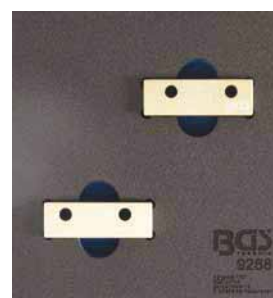
## Camshaft Locking Tool Set | for Alfa Romeo 1.6I ECO

- for checking / adjusting the engine timing
- to be used as OEM 1870797000

### suitable for:

- Alfa Romeo 147 (937) 1.6L 77KW ECO Twin Spark
- camshaft locking tool for inlet cam cylinder 3
- camshaft locking tool for outlet cam cylinder 2

Item #
9268



## Camshaft Locking Tool | for Fiat, Lancia 1.4 12V

- for locking of camshafts when setting the engine timing
- to be used as OEM 1860899000

### suitable for the following models:

- Fiat Bravo, Brava, Lancia Y10 1.4 12V
- engine codes: 182A3.000, 182A5.000

Item #		1/6
9225		



## Camshaft Locking Tool Set | for Fiat, Lancia 1.8l 115 HP

- for checking / adjusting the engine timing
- to be used as OEM 1860875000

### suitable for the following models:

- Fiat Bravo/Brava/Marea 1800 16V 115 HP
- Lancia Delta/Dedra 1800 16V 115 HP
- camshaft alignment tool for inlet cam 2nd cylinder
- camshaft alignment tool for inlet cam 3rd cylinder

Item #		1/6
9261		



## Camshaft Locking Tool Set | for Fiat, Lancia, Alfa Romeo 1.8l 130 HP

- for checking / adjusting the engine timing
- to be used as OEM 1860847000

### suitable for the following models:

- Fiat / Lancia / Alfa Romeo 1.8L 16V 130 HP
- camshaft locking tool for inlet cam cylinder 2
- camshaft locking tool for outlet cam cylinder 3

Item #		1/6
9262		



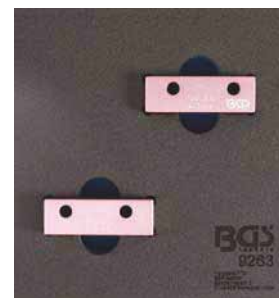
## Camshaft Locking Tool Set | for Fiat 2.0l 20V

- for checking / adjusting the engine timing
- to be used as OEM 1860892000

### suitable for the following models:

- Fiat Bravo/Brava/Marea 2.0L 20V 5-cylinder
- camshaft locking tool for inlet cam cylinder 3
- camshaft locking tool for outlet cam cylinder 2

Item #		1/6
9263		



## Camshaft Locking Tool Set | for Fiat, Lancia 1.8l 16V

- for checking / adjusting the engine timing
- to be used as OEM 1870697000

### suitable for the following models:

- Fiat Coupe / Barchetta / Punto (HJT) / Barchetta (HJT)
- Lancia Delta / Dedra Step"A"
- camshaft locking tool for inlet cam cylinder 2
- camshaft locking tool for outlet cam cylinder 3

Item #		1/6
9267		



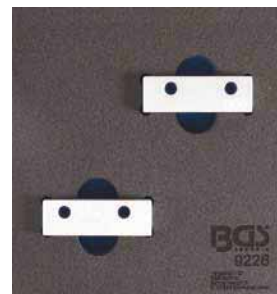
## Camshaft Locking Tool Set | for Lancia K 2.0l 20V

- for checking / adjusting the engine timing
- to be used as OEM 1860961000

### suitable for the following models:

- Lancia 2.0L 20V 5-cylinder VIS (manufactured after 1996)
- camshaft locking tool for inlet cam cylinder 2
- camshaft locking tool for outlet cam cylinder 3

Item #		1/6
9226		



## Camshaft Locking Tool Set | for Lancia 2.4 20V

- for checking / adjusting the engine timing
- to be used as OEM 1860818000

### suitable for the following models:

- Lancia 2.4L 20V 5-cylinder (manufactured before 1996)
- camshaft locking tool for inlet cam cylinder 3
- camshaft locking tool for outlet cam cylinder 2

Item #		1/6
9229		



## Camshaft Locking Tool Set | for Lancia 2.0 VIS 4 Cylinder

- for checking / adjusting the engine timing
- to be used as OEM 1860819000

### suitable for the following models:

- Lancia Kappa 2.0, 2.4 20V (1994-1997)
- camshaft locking tool for inlet cam cylinder 3
- camshaft locking tool for outlet cam cylinder 2

Item #		1/6
9228		



## Engine Timing Tool Set | for Fiat, Lancia

- for locking the flywheel and crankshaft
- adjusting the crankshaft
- adjusting the camshaft
- locking the fuel injection pump shaft
- pulling off the crankshaft pulley
- tensioning of the timing belt
- to be used as OEM 1 860 847 000, 1 860 875 000, 1 870 697 000, 1 860 895 000, 1 895 879 000, 1 860 898 000, 1 860 992 000, 1 860 992 000, 1 863 000 (8mm), 1 860 771 000, 1 860 161 000, 1 860 874 000, 1 860 874 000, 1 860 876 000, 1 860 845 000, 1 860 876 000, 1 860 965 000, 1 860 901 000, 1 860 905 010, 1 860 987 000, 1 860 985 000

Item #	Description
8148	Engine Timing Tool Set   for Fiat, Lancia
8148-13	Gauge Adaptor for BGS 8148
8159-16	Tensioner Wrench   for Fiat
8159-17	Gauge to determine the Piston height
8159-6	Camshaft Locking Tool   for Fiat, Alfa, Lancia   2 pcs.



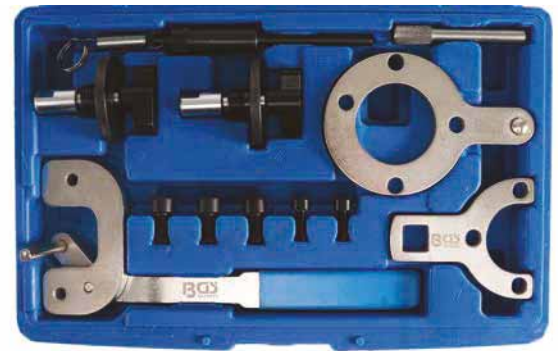


## Engine Timing Tool Set | for Fiat, Ford, Opel, Suzuki 1.3l Diesel

- for checking and adjusting the engine timing

### suitable for the following models:

- Fiat
  - Punto 1.3 JTD Multi-Jet 188A9.000, manufactured between 2003 and 2007
  - Panda 1.3 JTD Multi-Jet 169A1.000, 188A8.000, manufactured between 2003 and 2009
  - Idea 1.3 JTD Multi-Jet 199A3.000, 188A9.000, manufactured between 2004 and 2006
  - Doblo 1.3 JTD Multi-Jet 188A9.000, manufactured between 2004 and 2006
  - Doblo Cargo 1.3 JTD 188A9.000, manufactured between 2004 and 2006
- Opel/Vauxhall:
  - Agila 1.3 CDTi Z13DT, manufactured between 2003 and 2008
  - Corsa-C 1.3 CDTi Z13DT, manufactured between 2003 and 2007
  - Combo-C 1.3 CDTi Z13DT, manufactured between 2003 and 2009
  - Corsa-D 1.3 CDTi Z13DTH, Z13DTJ, manufactured between 2006 and 2009
  - Astra-H 1.3 CDTi Z13DTH, manufactured between 2004 and 2009
  - Tigre-B 1.3 CDTi Z13DT, manufactured between 2004 and 2009
  - Meriva 1.3 CDTi Z13DT, Z13DTJ, manufactured between 2004 and 2009
- Suzuki:
  - Ingis 1.3 CDTi Z13DT, manufactured between 2003 and 2009
  - Wagon 1.3 CDTi Z13DT, manufactured between 2003 and 2009
  - Swift 1.3 CDTi Z13DT, manufactured between 2003 and 2010
- Ford Ka 1.3 TDCi
- counterholding tool for crankshaft pulley, to be used as Fiat Ford OEM 1871000200 - Ford OEM 303-1469 - Opel/Vauxhall OEM KM-662-C
- crankshaft adjustment tool, to be used as Opel / Vauxhall OEM EN 46785 OEM KM 955, Suzuki 09912-38300
- camshaft adjustment tool, to be used as Fiat OEM 1871000900 / 1860985000 - Ford OEM 303-1472, Opel (Vauxhall) OEM EN 46781 - Suzuki OEM 09917-68610
- chain tensioning lever, to be used as Fiat OEM 1870900400
- crankshaft locking tool, to be used as Fiat OEM 1870900300 - Ford OEM 303-1468
- camshaft adjustment tool, Fiat 8 mm



Item #
8669

## Engine Timing Tool Set | for Fiat 1.2 16V

- for checking and adjusting the engine timing
- suitable for the following models:
  - Fiat 500 1.2 (2007) - Brava 1.2 - Bravo 1.2 16V (1995 - 2002) - Grande Punto 1.2, Idea 1.2, Idea 1.2 16V - Marea 1.2 , Marea Weekend, Marengo 1.2 - Palio Weekend 1.2 16V (1993 - 1999) - Punto 1.2 (1993 - 1999) - Punto Classic 1.2 16V (1999) - Stilo 1.2
  - Lancia Ypsilon 1.2 16V (1996 - 2003)
  - engine codes: 176B9.000, 169A4.000, 182B2.000, 188A5.000
- piston height adaptors (2 x), to be used as OEM 1860992000
- camshaft adjusting tools (2 x), to be used as OEM 1860985000
- tensioner pulley wrench, to be used as OEM 1860987000



Item #
8725

## Engine Timing Tool Set | for Fiat, Peugeot, Citroën 1.8, 2.0 8V Petrol

- for checking the engine timing
- suitable for engine codes LFW, RFU, RGX, RFW
- crankshaft locking tool 6 mm
- camshaft locking tool 10 mm
- camshaft locking pins 2x
- timing belt tensioning tool
- to be used as OEM 0132Q, 0132QZ, 0132Z, 0132R, 1053AA, 1053AB, 1053ZY, 0153G, 4507TA, 4507TB, 5711TA, 7014TN, 9767.27, 7014TM, 0132X, 0132X1Z, 4507T, 4507TJ, 1860755000, 1860161000, KM955

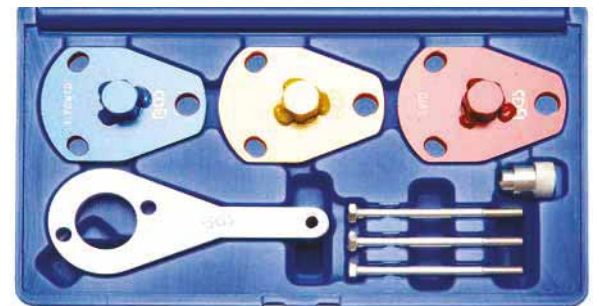


Item #
8740



## Engine Timing Tool Set | for Fiat 1.7, 1.9 Diesel

- for adjusting the engine timing on Fiat engines 176B3.000, 176A3.000, 176A5.000, 149B1.000, 160A6.000, 160A7.000, 160D1.000, 230A2.000, 230A3.000, 230A4.000, 280 A1.000
- suitable for Fiat models Punto 1.7D / TD, Tipo 1.9D, Ducato 1.9D / TD, Tempra 1.9TD with adjustable camshaft sprocket
- camshaft locking tool, to be used as OEM 1860932000
- camshaft locking tool, to be used as OEM 1860934000
- camshaft locking tool, to be used as OEM 1860931000
- crankshaft locking tool, to be used as OEM 1860933000



Item #
8741

## Engine Timing Tool Set | for Alfa Romeo, Lancia, Fiat 0.9

- for adjusting the engine timing when e. g. replacing timing chain, cylinder head repairs, etc.

**suitable for the following models with the engine code 312A2000:**

- Alfa Romeo Mito 2012
- Fiat 500 2010
- Fiat Panda 2012
- Fiat Punto 2012
- Lancia Ypsilon 2012
- crankshaft locking pin to be used as OEM 2000035300
- belt pulley locking pin to be used as OEM 2000035200
- camshaft locking plate to be used as OEM 2000035100



Item #
8815

## Engine Timing Tool Set | for Fiat, Opel, Alfa 1.9/2.4l 16V Diesel

- for adjusting the engine timing when e.g. changing the timing belt, cylinder head repairs, etc.

**suitable for the following engines:**

- Opel 1.9 CDTi Z19DT, Z19DTH, Z19DTJ
- Alfa-Romeo 1.9 and 2.4 L diesel with engine codes: 323.02, 371.01, 342.02, 325.01, 362.02, 182B9.000, 937A2.000, 937A3.000, 192A5.000, 192B1.000, 937A4.000, 937A5.000, 939A2.000, 939A1.000, 939A7.000, 939A8.000, 839A6.000, 841C.000
- Fiat 1.9 and 2.4 L diesel with engine codes: 182B4.000, 182B9.000, 185A6.000, 186A6.000, 186A8.000, 186A9.000, 188A2.000, 188A7.000, 188B2.000, 192A1.000, 192A3.000, 192A5.000, 192A8.000, 192A9.000, 192B4.000, 192B5.000, 198A2.000, 198A3.000, 198A6.000, 199A5.000, 223A7.000, 937A5.000, 939A1.000, 939A2.000, 939A3.000, 939A7.000
- crankshaft locking tool to be used as OEM Opel EN-46788 / Fiat 1.860.905.000 / 1.860.905.010
- flywheel locking tool to be used as OEM Fiat 1.860.898.000
- camshaft locking tool to be used as OEM Opel EN-46789 / Fiat 1.870.896.900
- locking pin Ø 3.7 mm x 70 mm to be used as OEM Opel KM 6130 / KM 6349



Item #
62665

## Engine Timing Tool Set | for Fiat, Alfa Romeo, Lancia 1.2 16V, 1.4 16V, T-Jet

- for adjusting the engine timing during timing belt replacement, cylinder head repair, replacement of the cylinder head gasket, etc.
- suitable for Alfa Romeo, Fiat and Lancia 1.2 16V / 1.4 16V / 1.4 T-Jet
- engine codes e. g. 169A3000, 179B9000, 182B2000, 188A5000, 192B2000, 198A1000, 198A4000, 199A6000, 199A8000, 843A1000
- crankshaft locking tool (with screws M6x30 and 3 pcs. M8x16), to be used as OEM 2.000.004.500
- camshaft adjusting tool (1 pair), to be used as OEM 1.860.985.000
- adjusting tool for piston height, to be used as OEM 1.860.992.000
- adjusting tool for timing belt tensioner, to be used as OEM 1.860.987.000
- locking tool for camshaft sprockets (with screw M8x30), to be used as OEM 2.000.015.800



Item #	Description
62666	Engine Timing Tool Set   for Fiat, Alfa Romeo, Lancia 1.2 16V, 1.4 16V, T-Jet
62666-1	Crankshaft Locking Tool   for Fiat, Alfa, Lancia

## Engine Timing Tool Set | for Fiat 1.4 12V

- for checking and setting the engine timing

suitable for the following Fiat models:

- Brava
- Bravo
- Marea Weekend
- Lancia Ypsilon
- engine codes: 182 A3.000, 182 A5.000
- camshaft alignment tool, to be used as OEM 1860 899 000
- crankshaft alignment tool, to be used as OEM 1860 901 000
- bolts for crankshaft adjusting tool, to be used as OEM 1 860 901 000



Item #
9213

## Engine Timing Tool Set | for Ford | 4 pcs.

- suitable for fuel engines 1.25 L, 1.4 L, 1.6 L, 1.8 L, 2.0 L, e. g. for Zetec, Zetec SE, etc.
- crankshaft timing tool to be used as OEM 303-748, 999-7152, 21-259, 303-574, 21-163, 303-620, 999-7201, 49J E02 024, 303-507, 21-210
- camshaft alignment plate to be used as OEM 303-376, 303-376B, 999-7151



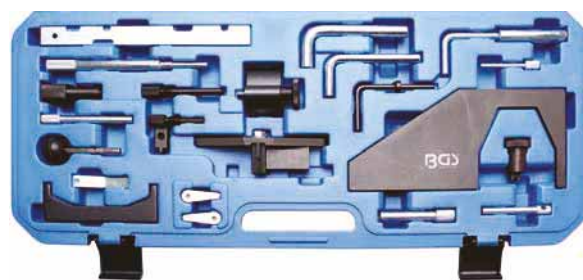
Item #	Description
8215	Engine Timing Tool Set   for Ford   4 pcs.
8215-1	Camshaft Locking Tool   for Ford



## Engine Timing Tool Set | for Ford

contains tools for:

- locking the flywheel
- locking the crankshaft, camshaft, pump shaft
- locking the fuel injection pump shaft
- extracting the crankshaft pulley
- tensioning the timing belt
- includes adjusting gauge for camshaft, crankshaft, pump shaft
- complete classification chart for vehicle types and scope of application included
- suitable for the following Ford engines:
  - 1.4, 1.6 16V, 1.7, 1.8 16V, 2.0 16V (also Zetec)
  - 1.4, 1.6, 1.8, 1.9 D/TD/TDCi
- to be used as OEM 21-162, 21-162B, 303-367, 303-376, 23-059, 310-085, 21-168, 303-393, 23-020, 23-047, 23-020, 21-163, 303-620, 23-019, 21-210, 303-507, 21-251, 303-698, 21-262, 303-734, 23-029, 303-1061, 23-058, 310-084, 21-105, 21-262, 303-734, 21-168, 303-393, 21-263, 303-735 / Mazda 49JE01061 / Audi 3359, T10008, T10050, 2065A / Seat 3359, T10008, T10050, 2065A / Skoda 3359, T10008, T10050, 2065A / Volkswagen 3359, T10008, T10050, 2065A



Item #	Description
8156-2	Crankshaft Locking Tool   for Ford   for BGS 8156
8156	Engine Timing Tool Set   for Ford
8156-3	Injection Pump Locking Tool   for Ford   for BGS 8156   15.4 mm
8156-4	Crankshaft Locking Tool   for Ford   for BGS 8156
8156-5	Crankshaft Locking Tool   for Ford   for BGS 8156
8156-6	Locking Pin   for Ford   for BGS 8156   8.2 mm
8156-12	Feeler Gauge   for Ford   for BGS 8156
8156-14	Crankshaft Locking Tool   for Ford   for BGS 8156   12.7 mm
8156-17	Camshaft Holding Tool   for Ford   for BGS 8156
8156-18	Hand Wheel   for Ford   for BGS 8156
8156-19	Crankshaft Locking Tool   for Ford   for BGS 8156

## Engine Timing Tool Set | for Ford Focus | 5 pcs.

- for replacing the cam belt on Ford Focus 1.6 TI-VCT engines, engine code HXDA (2003-2007) and 2.0 TDCi with engines codes G6DA, G6DB, G6DC 2003-2007
- camshaft sprocket holding tool to be used as OEM 303-1097
- tensioner pulley locking pin to be used as OEM 303-1054
- flywheel timing pin to be used as OEM 303-1059, 303-1270, 0188X, 999-7121
- crankshaft timing pin to be used as OEM 303-748, 999-7152, 21-259
- camshaft sprocket locking tool to be used as OEM 303-735, 999 7122, 0187B, 0189B, 0132AJ1, 21-263, 0188M, MOT 1430, 303-1277, 0194B



Item #
8218



## Engine Timing Tool Set | for Ford 2.0, 2.4 TDCi | TDDi

- for locking or positioning of the cam, injection pump and crankshaft
- needed for chain changes, engine repairs and work on the injection pump
- suitable for Ford 2.0, 2.4 16V TDCi and TDCi engines, installed in e. g. Mondeo, Transit (2001 - 2004) etc.
- for engine code FMBA/B, D5BA, ABFA, D3FA, F3FA, D2FA, D4FA, F4FA
- to be used as OEM 303-675 (21-234), 303-681 (21-240) and 303-698 (21-251)



Item #
8317

## Engine Timing Tool Set | for Fiat, Ford, Lancia 1.2, 1.4 8V

- facilitates changing of the timing belt and allows checking of the engine timing on following cars:
  - Fiat 500 (07-12), Doblo/Cargo (05-10), Grande Punto (07-12), Idea (04-12), Linea (07-11), Panda EVO2, Punto EVO (09-12)
  - Lancia Ypsilon (06-11), Musa (05-12)
  - Ford Ka (09-12)
- with engines:
  - Fiat 1.2/1.2 Dualogic, 169A4.000, 188A4.000 (only EVO2), 199A4.0001.4/1.4 Bi-Fuel LPG / 1.4 Natural power CNG, 199A7.000, 350A1.000
  - Lancia 1.4/1.4 Bi-Fuel LPG, 350A1.000
  - Ford 1.2 Duratec, 169A4.000 (FP4)
- crankshaft locking tool, to be used as OEM 2.000.004.500 on Fiat/Lancia and OEM 303-1480 on Ford
- camshaft setting tool, to be used as OEM 2.000.004.400 on Fiat/Lancia and OEM 303-1479 on Ford
- camshaft sprocket locking tool, to be used as OEM 2.000.004.200 on Fiat/Lancia and OEM 303-1477 on Ford
- camshaft cover aligner, to be used as OEM 2.000.004.300 on Fiat/Lancia and OEM 303-1478 on Ford
- tensioner adjuster, to be used as OEM 1.860.987.000 on Fiat/Lancia

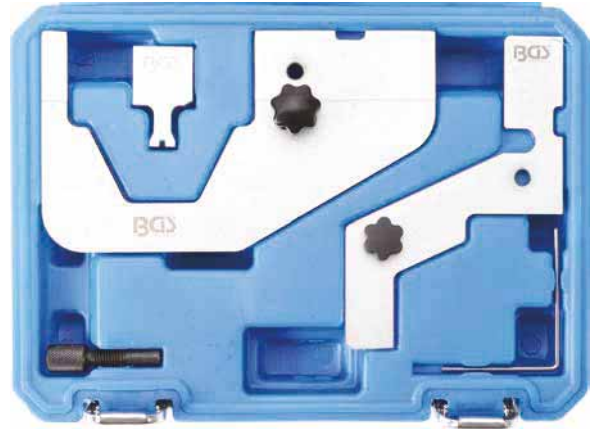


Item #
8578

## Engine Timing Tool Set | for Ford 2.0 Ecoboost

- for adjusting the engine timing on chain driven 2.0L petrol direct injection engines with variable valve timing
- installed in the Galaxy / Mondeo / S-MAX / Focus models
- engine codes TNWA / TNBA / TPWA / MGDA / XQDA
- crankshaft locking tool, to be used as OEM 303-748
- camshaft alignment plate (up to 05.2011), to be used as OEM 303-1504
- camshaft alignment plate (after 05.2011), to be used as OEM 303-1565
- alignment tool for crankshaft position sensor, to be used as OEM 303-1521
- 2.5 mm tensioner locking pin

Item #
8874



## Crankshaft Locking Tool | for Ford Transit 2.2

- suitable for Ford Transit 2.2 manufactured before 2006
- for locking crankshaft and flywheel
- allows the TDC sensor position to be set after working on cam chain drive system
- crankshaft locking tool to be used as OEM 303-1587
- flywheel locking tool to be used as OEM 21-251 / 303-698
- timing pump locking pin to be used as OEM 0188H / 1860965000

Item #
8896



## Chain Housing Cover Alignment & Pump Sprocket Removal Tool Set | for Ford 1.8 TDDi / TDCi

- for alignment of chain housing cover and for removing of high pressure pump sprocket
- during works on high pressure pump chain, for example
- tools are complementary for engine timing tool set BGS 8156

### suitable for the following models:

- Focus 1.8 TDCi (2004 - 2011)
  - engine codes: KKDA, KKDB
- C-Max 1.8 TDCi (2003 - 2007)
  - engine codes: KKDA, BHPA, HCPA
- Tourneo Connect 1.8 TDCi (2002 - 2013)
  - engine codes: HCPA, HCPB (2002 - 2006), RWPA, R2PA, P7PA, P9PA, R3PA (2006-2013), P9PB, RWPC (2009 - 2013)
- Tourneo Connect 1.8 TDDi (2002 - 2006)
  - engine code: BHPA
- Mondeo 1.8 TDCi (2007 - 2010)
  - engine codes: FFBA, QYBA, KHBA
- Mondeo 1.8 TDCi Econetic (2008 - 2010)
  - engine code: KHBA
- Transit Connect 1.8 TDCi (2002 - 2013)
  - engine codes: HCPA, HCPB (2002 - 2006), RWPA, P7PA, R2PA, P9PA, R3PA (2006 - 2013), P9PB, RWPC (2009 - 2013)
- Transit Connect 1.8 TDDi (2002 - 2006)
  - engine code: BHPA
- chain housing cover alignment tool, to be used as OEM 303-652 (21-230)
- high pressure pump sprocket disassembly tool, to be used as OEM 303-095 (23-067)



Item #	
9387	 <b>1/6</b>

## Engine Timing Tool Set | for Ford 1.0, 3-cylinder EcoBoost

- for checking / adjusting the engine timing
- suitable for Ford engines 1.0L 3-cylinder, with 74 KW / 88 KW / 92 KW / 103 KW, installed on e.g. Fiesta / Focus / B-MAX / EcoSport
- Engine codes M1DD / M1JA / M1JC / M1JE / M1JHM1JJ / M1DA / M2DA / M2DB / M2DC / SFDBSFJA / SFJB / SFJC / SFJD /
- camshaft fixing tool, to be used as OEM 303-1605 (x 2)
- camshaft adjuster setting tool, to be used as OEM 303-1606 (x 2)
- crankshaft locking pin, to be used as OEM 303-1604
- flywheel locking tool, to be used as OEM 303-1602, 303-393A, 21-168
- idler fixing pin, to be used as OEM 303-1054



Item #	
9072	 <b>1/3</b>

## Belt tensioner Wrench | Ford Duratorq Engines

- suitable for Ford Duratorq 2.0 / 2.2 (TDDI / TDCI) engine codes: D5BA / D6BA / HJBA / HJBC / FMBA / N7BA / QJBB / QJBA



Item #
8533

## Crankshaft Locking Pin | for Ford Zetec, Duratec Engines

- suitable for Ford Zetec SE and Duratec 1.25, 1.4, 1.6l engines, installed in Fiesta, Fusion and Focus
- to be used as Ford OEM 303-748, 21-259, Mazda OEM 49J E02 024, Volvo OEM 999 7201



Item #
8671



## Engine Timing Tool Set | for Ford Duratorq 2.0, 2.4 Diesel

- is needed when working on timing chain, cylinder head, etc.
- includes flywheel, pump, camshaft and chain tensioner locking pins to be used as OEM 21-234, 21-251
- suitable for Ford Mondeo and Transit 2.0 I / 2.4 I Duratorq 16V (TDDi and TDCi), engine codes ABFA, D2FA, D3FA, D5BA, D6BA, D0FA, FIFA, F3FA, F4FA, FMBA/B, FXFA, H9FA, H9FB, HJBA/B, HJBC, HJBE, JXFA, N7BA/B, PHFA, SDBA



Item #
8672



## Engine Timing Tool Set | for Ford TDCi, PSA Hdi, Mazda D 1.4, 1.6

- for setting the engine timing when replacing the cylinder head gasket, camshaft, etc.

### suitable for the following engines:

- Citroen 1.4Hdi DV4TD (8HT/8HW/8HX/8HZ), 1.4Hdi DV4TED4 (8HV/8HY), 1.6Hdi DV6TED4 (9HY/9HZ), 1.6Hdi DV6ATED4 (9HW/9HX), 1.6Hdi DV6UTED4(9HU)
- Mazda 1.4CiTD F6JA, F6JB 1.6CiTD Y6
- Peugeot 1.4Hdi DV4TD (8HT/8HW/8HX/8HZ), 1.4Hdi DV4TED4 (8HV/8HY), 1.6Hdi DV6TED4 (9HY/9HZ), 1.6Hdi DV6ATED4 (9HW/9HX), 1.6Hdi DV6UTED4(9HU)
- Ford 1.4TDCi F6JA, F6JB, F6JC, F6JD 1.6TDCi G8DA, G8DB, HHDA 1.6TDCi HHDB, HHJA, HHJB, HHJD
- Volvo 1.6D D4164T
- flywheel locking bolt, to be used as OEM PSA 0194-C, Ford 303-734 (21-262), Volvo 999-7169, Mazda 49 JE02 020
- crankshaft & high pressure pump locking pin, 2 pcs., to be used as OEM PSA 0194-A, Ford 303-732 (21-260), Volvo 999-7233, Mazda 49 JE02 018
- camshaft locking pin, to be used as OEM PSA 0194-B, Ford 303-735 (21-263), Volvo 999-7122, Mazda 49 JE02 021



Item #
8673



## Diesel Pump Sprocket Puller | for Ford

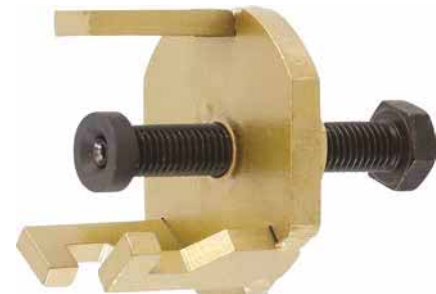
- for pulling off the diesel pump sprocket
- suitable for Ford Transit 2.2 TDCI engine (Puma) as of year 2011



Item #
8974

## Camshaft Sprocket, Pump Wheel Extractor | for Ford

- can also be used for pulling off the impeller
- suitable for the following engine codes: F8M, F8Q, J8S, S8U, S9U
- 90 x 65 mm



Item #
66350



## Engine Timing Tool Set | for Land Rover, Jaguar V8

- for adjusting and checking the engine timing
- required for e.g. working on valve drive and renewing the cylinder head gasket

### suitable for 3.2, 3.5, 4.0, 4.2, 4.4L engines in the following models:

- Jaguar XJ8 (97-09), engine AJ26 AC, BC, LC, 1B, 5G, SB
- Jaguar XJR (97-09), engine AJ27 KB, CC, MA, 2B, 9G, TB
- Jaguar S-Type (99-08), engine AJ28 KC, CE, MB, 3B, HB, PC
- Jaguar XF (08-09), engine AJ34 3.5, DC, NB, 1G, HG
- Jaguar XK8 (97-09), engine RB, EC, NC
- Jaguar XKR (98-09), engine GB, PA
- Range Rover (new) (06-09), 4.2L engine (428 HP)
- Range Rover (05-09), 4.2L engine (428 HP)
- Land Rover Discovery III (05-09)
- flywheel locking pin (silver), to be used as OEM 303-531
- flywheel locking pin (gold), to be used as OEM 303-645
- 2 camshaft setting plates, to be used as OEM 303-530
- camshaft gear holding tool, to be used as OEM 303-532
- 2 tensioner wedges, to be used as 303-533
- primary tensioner locking pin, to be used as OEM T40011
- setting tool for VVT unit, to be used as OEM 303-654
- tensioner depress pin



Item #		1/3
9006		3

## Engine Timing Tool Set | for Jaguar, Land Rover 5.0 V8

- for adjusting and checking the engine timing
- required for working on valve drive and renewing the cylinder head gasket
- suitable for following models with 5L V8 engine: X150–XK(10MY), X250–XF(10MY), X351–XJ(10MY)
- camshaft alignment tools, to be used as OEM 303-1445
- crankshaft timing pin, to be used as OEM 303-1447
- flywheel locking tool, to be used as OEM 303-1448
- camshaft turning tool, to be used as OEM 303-1452
- timing chain pre-tensioning tool, to be used as OEM 303-1482



Item #		1/3
9009		3



## Engine Timing Tool Set | for Jaguar, Land Rover, Ford, Citroën 2.0, 2.2, 2.4, 3.2 Diesel

- for adjusting and checking the engine timing
- required for e. g. working on the valve drive and renewing the cylinder head gasket

### for the following models:

- Ford Mondeo (2000 - 2007), Transit (2000 - 2011)
- Citroen Relay (2006 - 2011), Jumper III
- Fiat Ducato (2006 - 2011)
- Jaguar X-Type (2001 - 2010)
- Land Rover Defender (2007 - 2011)
- Peugeot Boxer III (2006 - 2011)
- LDV Convoy (2002 - 2006)
- with DURATORQ (PUMA) diesel engines
- 2.0L engine codes: ABFA, D3FA, D5BA, D6BA, F3FA, F1FA, FMBA, HJBA, HJBB, HJBC, HJBE, N7BA, N7BB
- 2.2l (chain driven high pressure pump), engine codes: QJBA (BG), QJBB, QJBC, QJBD
- 2.2l (camshaft driven high pressure pump), engine codes: 4HM, 4HU, 4HV, P8FA, P22DTE, QVFA, QWFA
- 2.4L with engine codes: 244DT, DOFA, D2FA, D2FB, D4FA, F4FA, FXFA, H9FA, H9FB, HE FA, HFFA, JXFA, PHFA, ZSD 424
- 3.2l with engine code: SAFA (only engine timing)
- engine cover aligner, to be used as OEM 303-682
- engine cover / crankshaft seal tool, to be used as OEM 303-679A
- high pressure pump sprocket retaining tool, to be used as OEM 303-1151
- high pressure pump removal tool, to be used as OEM 303-249
- flywheel locking pin, to be used as OEM 303-675
- flywheel locking pin, to be used as OEM 303-698
- 3-piece locking pin set, 6 mm
- tensioner locking pin, 2 mm



Item #	
9010	 

## Engine Timing Tool Set | for Land Rover, Jaguar 2.7

- for adjusting and checking the engine timing
- required for working on valve drive and renewing the cylinder head gasket

### suitable for the following models:

- Jaguar S-Type TDVi (2004 - 2009)
- Land Rover TDV6 Discovery
- Range Rover Sport TDV6 (2004 - 2006)
- engine code 276DT
- flywheel locking tool (manual) to be used as OEM 303-1116
- flywheel locking tool (automatic) to be used as OEM 303-1117
- camshaft sprocket alignment tool, to be used as OEM 303-1132
- camshaft sprocket alignment pins, 2 pcs., to be used as OEM 303-1126 (PSA 0195H)



Item #	
9005	 

## Engine Timing Tool Set | for Jaguar, Land Rover 2.7, 3.0 TD V6

- for adjusting and checking the engine timing
- required for working on the valve drive and renewing the cylinder head gasket

### suitable for the following models:


- Citroen C5 III (2007 - 2009), C6 (2005 - 2009)
- Jaguar S-Type (2004 - 2008), XF (2008 - 2012), XJ (2010 - 2012), XJ6 (2005 - 2010)
- Range Rover Sport (2005 - 2009)
- Peugeot 407 (2004 - 2009), 407 Coupe (2006 - 2009), 607 (2004 - 2011) 2.7TD V6 / TDVi (276DT) 2.7D HDi (DT17BTED4) (UHZ) 3.0D HDi (D20CTED4) (X8Z) 3.0D SD V6 / TD V6 (306DT) (AJ-V6D)
- flywheel locking tool (manual), to be used as OEM (Rover) 303-1116
- flywheel locking tool (automatic), to be used as OEM (Rover) 303-1117
- camshaft sprocket alignment tool, to be used as OEM (Rover) 303-1132
- camshaft sprocket alignment pins, 2 pcs., to be used as OEM (Rover) 303-1126, (PSA) 0195H
- coolant pump locking pin, to be used as OEM (PSA) 0195-C
- flywheel locking tool, to be used as OEM (PSA) 0195-K
- tooth belt holding clip, to be used as OEM (PSA) 0188-K



Item #	
9008	   1/6

## Camshaft Locking Tool | for Rover, MG

- suitable for Rover- and MG models
- length: 44.5 mm
- width: 33.5 mm
- height: 15 mm

Item #	
1764	

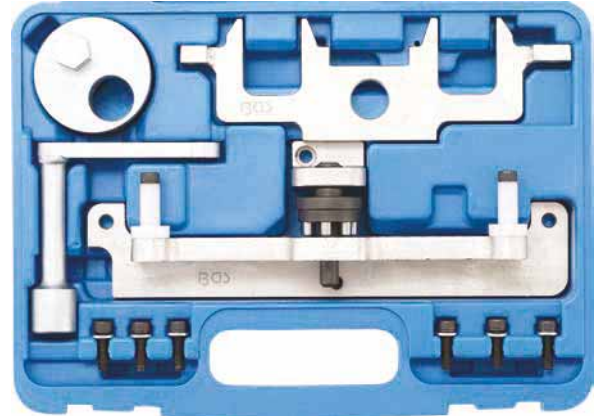


## Timing Chain Mounting Tool Set | for Mercedes-Benz Engine 651 | 10 pcs.

- prevents skipping of chain and moving of camshaft sprockets when replacing the timing chain
- removing of camshaft sprockets is not required
- allows precise positioning

### suitable for the following models:

- Mercedes-Benz engine OM 651 series
- timing chain guide tool, to be used as OEM 60831800
- camshaft locking tool, to be used as OEM 60831830
- crankshaft turning tool, to be used as OEM 60831810
- camshaft rotation key, to be used as OEM 60831820



Item #
9378

## Engine Timing Tool Set | for Mercedes-Benz M271

- is required when changing the timing chain
- suitable for the following Mercedes-Benz models: CLK 200K (W209), C 180K, C200K, C 230K (W203), C Sportcoupe C 160K, C 180K, C 200K, C 230K, E 200K (W211), SLK 200K (R171), C 180K (W204), CLC 180K, CLC 200K, C 180 CGI, C 200CGI, C 250CGI (W204), E 200CGI, E 250CGI (W212, C207)
- suitable for engines with the following engine codes: M271 E18ML (02-), DE18ML (03-05), E16ML (08-), DE18LA (09-)
- holding device for timing chain, to be used as OEM 271589014000
- camshaft locking tool, to be used as OEM 271589006100
- locating pin, to be used as OEM 271589001500
- timing chain tool, to be used as OEM 271589003100



Item #	Description
62623	Engine Timing Tool Set   for Mercedes-Benz M271
62623-1	Tool Tray 1/3, empty   for Item 62623



## Engine Timing Tool Set | for Mercedes-Benz M112 + M113

- required for works on timing chain or adjusting the engine timing
- holds left & right side camshaft in adjusting position

### suitable for the following models with M112 or M113 engine:

- Mercedes-Benz C-class 240/280 (202) (1997-)
- Mercedes-Benz C-class 240/320 (203) (2000-)
- Mercedes-Benz CL 500 (215) (1999-2006)
- Mercedes-Benz CLK 320/430 (208) (1997-2003)
- Mercedes-Benz CLK 240/320/500/55AMG (209) (2002-2006)
- Mercedes-Benz CLS 500/55AMG (219) (2004-2006)
- Mercedes-Benz E-class 240/280/320/430 (210) (1997-2002)
- Mercedes-Benz E-class 240/320/500/E55AMG (211) (2003-2006)
- Mercedes-Benz M-class ML320/350/430/500/55AMG (163) (1997-2005)
- Mercedes-Benz M-class 500 (164) (2005-2007)
- Mercedes-Benz S-class 280/320/350/430/500 (220) (1998-2005)
- Mercedes-Benz SL 280/320/500 (129) (1998-2002)
- Mercedes-Benz SL 350/500/55AMG (230) (2001-2008)
- Mercedes-Benz SLK 320K (170) (2000-2004)
- Mercedes-Benz SLK 55AMG (171) (2004-2010)
- Mercedes-Benz R-class 500 (2006-2007)
- Mercedes-Benz Viano 3.0/3.2/3.5 (2003-2008)
- Mercedes-Benz Vito 123 (639) (2004-2008)
- Chrysler Crossfire (SRT-6) (2003-2007)
- camshaft locking tool (right-side), to be used as OEM 112589003200
- camshaft locking tool (left-side), to be used as OEM 112589013200
- camshaft rotation key, to be used as OEM 112589000100



Item #	
9215	 <b>1/3</b>

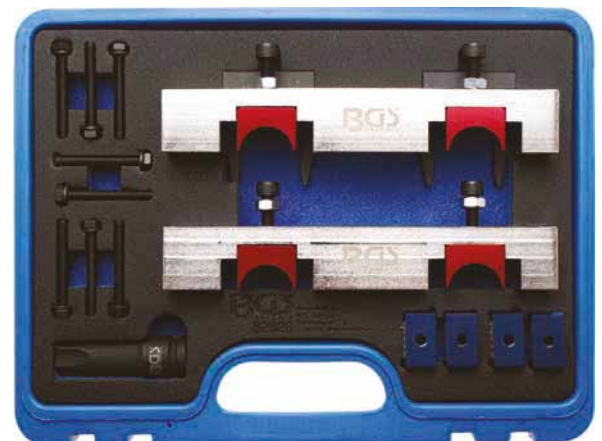
## Engine Timing Tool Set | for Mercedes-Benz M270, M274, M133

- for setting and checking the engine timing
- allows holding down and fixing of the camshaft

### suitable for the following models:

- Mercedes-Benz A-class (W176) as of 2012, model A180 / A200
- Mercedes-Benz B-class (W246) as of 2011, model B180 / B200
- to be used as OEM 270589006100

Item #
62628





## Engine Timing Tool Set | for Mercedes-Benz M276, M157, M278 | 12 pcs.

- for adjusting the camshaft in the adjustment position

### suitable for the following Mercedes-Benz models:

- CL 500 / 63 AMG (C 216) 2010–2013
- S 500 / 63 AMG (C 217) as of 2014
- CLS 300 (C 218) as of 2012
- E 300 / 350 / 400 (C/A 207) as of 2011
- CLS 350 / 400 / 500 / 63 AMG (C/X 218) 2011–2014
- SLK 350 (R 172) as of 2011
- SL 350 / 400 / 500 / 63 AMG (R 231) as of 2012
- S 500 PLUG-IN HYBRID (V 222) as of 2014
- ML 300 / 350 / 500 / 63 AMG (W 166) as of 2011
- C 400 (W 205) as of 2014
- E 400 HYBRID (W 212) as of 2012
- G 63 AMG (W 463) as of 2012
- E 300 / 350 / 400 / 500 / 63 AMG (W/S 212) as of 2011
- C 350 (W/S/C 204) as of 2011
- S 350 / 500 / 63 AMG (W/V 221) as of 2010
- S 400 / 63 AMG (W/V 222) as of 2013
- R 350 BlueEFFICIENCY (W/V 251) as of 2012
- GL 450 / 500 (X 166) as of 2012
- GLK 350 (X 204) as of 2011

- to be used as OEM 276589004000, 276589014000

Item #
62632



Engine Timing

## Engine Timing Tool Set | for Mercedes-Benz OM651

- for adjusting the cam and crankshafts

### suitable for the following Mercedes-Benz models:

- A-class W176 180/200/220 CDI
- B-class W246 200/220 CDI
- C-class W/S/C 204 180/200/220/250 CDI
- C-class W205 220/250
- CLA C117 200/220 CDI
- CLS C/X 218 220/250
- E-class W/S 212 200/220/250 CDI
- E-class C/A 207 220/250 CDI
- E-class W212 250/300 BlueTEC
- GLA X156 200/220 CDI
- GLK X 204 200/220/250 CDI
- ML W166 250
- SLK R172 250 CDI
- Sprinter W906 210/310/510/213/313 CDI
- Sprinter W906 513/216/316/416/516 CDI
- V-class W/V 447 200/220/250 CDI
- Viano W/V 639 2.0/2.2CDI
- Vito W/V 639 110/113/116 CDI
- camshaft alignment tool, to be used as OEM 65158 901 4000
- crankshaft rotating tool, to be used as OEM 65158, 900, 4000

Item #
62633



## Diesel Pump Locking Pin | for Mercedes-Benz

- for locking Bosch inline diesel pumps in mounting position
- to be used as OEM 601 589 05 21 00
- suitable for Mercedes-Benz 200D / TD, 250D / TD, 300D / TD
- engines: 601.912 / 602.912 / 602.962 603.913 / 606.910 / 603.963



Item #
8905

## Camshaft Holding Tool | for Mercedes-Benz 272 / 273 Engines

- for locking the left intake camshaft in place
- required when servicing the camshaft chain drive
- to be mounted with threaded bolt on cylinder head

### suitable for the following models:

- Mercedes-Benz engines 272, 273
- C, CL, CLK, E350, E550, S400, S550, SL550, SLK280, SLK300, SLK350, G550, GL450, GL550, GLK350, ML350, ML450, ML550 und R350 models (2005-2012), 164.156, 164.172, 164.186, 164.195, 164.871, 164.886, 171.454, 171.456, 171.458, 203.052, 203.054, 203.056, 203.087, 203.092, 204.054, 204.056, 204.081, 204.087, 204.956, 204.987, 207.356, 207.372, 207.456, 207.472, 209.356, 209.372, 209.456, 209.472, 211.056, 211.072, 211.087, 211.090, 211.256, 211.287, 212.056, 212.072, 212.087, 212.090, 212.287, 216.371, 216.386, 219.372, 221.171, 221.186, 221.195, 230.471, 251.156, 251.165, 463.236, 463.237



Item #
8227

## Engine Timing Tool Set | for Opel

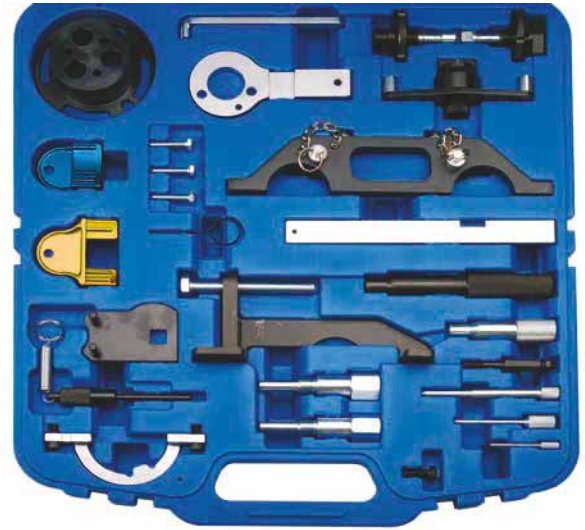
- for adjusting timing when e. g. when replacing the cylinder head gasket

### suitable for the following Opel engines:

- Z19DT - Z19DTH (OHC and DOHC) Vectra C, Signum 2004
- Z13DT Corsa, Combo 2004
- Z22SE Astra G, Vectra C, Zafira, Signum, Speedster Vx220 2000 - 2004
- petrol 1.0 12V - 1.2 - 1.4 16V (X10XE, Z10XE, Z10XEP, X12XE, Z12XE, Z14XEP) Corsa, Agila, Astra, Meriva
- diesel 2.0 - 2.2 Ecotec (X20DTL, X20DTH, X22DTH) Astra, Caravan, Zafira, Vectra, Omega, Sintra, Frontera
- partly suitable for identical engines from Renault and Saab

### scope of delivery:

- water pump locking tool, to be used as OEM KM-J-43651
- flywheel locking tool, to be used as OEM 911
- crankshaft locking tool, to be used as OEM EN-46788, KM 952, KM 929, EN-46785
- camshaft locking tool, to be used as OEM KM 852, KM 853, KM 6148, EN-46789, KM 6340, EN-46781
- camshaft adjustment gauge, to be used as OEM KM 932, KM 953
- flywheel locking tool, to be used as OEM KM 6333
- camshaft alignment tool, to be used as OEM KM 933
- injection pump locking tool, to be used as OEM KM 927
- belt tensioner locking tool, to be used as OEM KM 955
- chain tensioner locking tool, to be used as OEM KM 955
- adjustment gauge for the camshaft speed sensor, to be used as OEM KM 954



Engine Timing

Item #	Description
8151-1	Water Pump Locking Tool   for Opel   for BGS 8151
8151-2	Camshaft Locking Tool   for Opel   for BGS 8151
8151-3	Camshaft Locking Tool   for Opel   for BGS 8151
8151-6	Adjusting Ruler for Pick-Up Disk   for Opel   for BGS 8151
8151-8	Crankshaft Locking Tool   for Opel   for BGS 8151
8151-10	Locking Pin for Timing Chain Tensioner   for Opel   for BGS 8151
8151-12	Camshaft Locking Tool   for Opel   for BGS 8151
8151-17	Crankshaft Locking Tool   for Opel   for BGS 8151
8151-19	Addition for Crankshafts Locking Tool   for Opel   for BGS 8151
8151-22	Tensioner Locking Tool   for Opel

## Engine Timing Tool Set | for Opel Ecotec V6

- engine timing tool set for Opel/Vauxhall Ecotec V6 engines with multiple valve technique
- includes all necessary tools for clamping / locking the crankshaft and camshaft

### suitable for the following Opel models:

- Calibra 2.5 V6 (1993 - 1998)
- Cavalier 2.5/2.6 V6 (1993 - 1995)
- Omega B 2.5/2.6 V6 (1994 - 2003)
- Omega B 3.0/3.2 V6 (1994 - 2003)
- Signum 3.2 V6 (2003 - 2005)
- Sinatra 3.0 V6 (1996 - 1999)
- Vectra A/B/C 2.5/2.6/3.2 V6 (1993 - 2005)
- crankshaft fixer tool, to be used as OEM KM-800-10
- camshaft setting gauge, to be used as OEM KM-800-20
- locking tool, to be used as OEM KM 800-30
- right camshaft locking tool, to be used as OEM KM-800-1
- left camshaft locking tool, to be used as OEM KM-800-2
- E-type socket, 12.5 mm (1/2") drive, E20 for return pulley
- combination spanner, angled, 30 mm



Item #
1779

## Engine Timing Tool Set | for Opel 1.0, 1.2, 1.4

- for changing the timing chain and other jobs on the valve train, working on the intake and exhaust camshafts, fixing the crankshaft

### suitable for the following Opel models:

- 1.0, 1.2, 1.4 (1997 - 2007)
- Agila (Z10XE, Z12XE, Z10XEP, Z12XEP)
- Corsa B (X10XE, X12XE)
- Astra G, H (X12XE, Z14XEL, Z14XEP)
- Corsa Combo C (X10XEP, X12XEP, Z14XEP)
- Meriva (Z14XEP)
- Tigra B (Z14XEP)
- Agila, Corsa 1.0 12V, 1.2 16V
- camshaft adjusting ruler
- crankshaft locking pin
- pulse disc adjusting tool
- timing chain tensioner pin

- to be used as OEM KM953, KM952, KM954, KM955

Item #
8303



## Engine Timing Tool Set | for Opel 1.6, 1.8

- contains tools for locking the camshaft and crankshaft
  - suitable for 1.6 and 1.8L engines with timing belt, installed in Opel / Vauxhall, Chevrolet, Fiat, Alfa Romeo (2003-2012), e. g. Astra G / H, Corsa D, Insignia, Meriva, Signum, Vectra C, Zafira B (2003-2011)
  - suitable for Chevrolet Cruze, Orlando 1.4 - 1.6 - 1.8 and Fiat Croma, Alfa Romeo 159 with engines 939A4.000
  - camshaft locking tool
  - camshaft sprocket locking tool
  - locking pins
  - flywheel holding tool
- to be used as OEM tool KM-6628-A, 2000012000KM-6340, 2000012100KM-6333KM-6625, 2000012800KM-6349, KM 6130KM-911



Item #
8697

## Engine Timing Tool Set | for Opel, GM 2.0, 2.2 Ecotec Diesel

- for setting the engine timing

### suitable for the following models:

- Opel Vectra 2.0 turbo diesel
- Opel Sintra 2.2 turbo diesel
- Opel Zafira 2.0 turbo diesel
- Opel Frontera 2.2 turbo diesel
- Saab 9-3 2.2 turbo diesel
- engine code X20DTL X20DTH X22DTH Y22DTR
- adjustment wrench with bracket, to be used as OEM Opel KM933 / Saab 8395394
- injection pump timing pin to be used as OEM Opel KM927 / Saab 8395337
- crankshaft setting pin to be used as OEM Opel KM929 / Saab 8395352
- camshaft setting plate to be used as OEM Opel KM932 / Saab 8395386



Item #
8785



## Engine Timing Tool Set | for Opel 1.2, 1.4

- for adjusting the engine timing

### suitable for the following Opel/Vauxhall models:

- Adam 1.2 LWD 1.4 L2Z 1.4 LDD (2012)
- Ampera 1.4 LUU/A14XFL (2011)
- Astra-J 1.4 LDD/A14XER 1.4 LDD/A14XEL 1.4 LUJ/A14NET 1.4 LUJ/A14NEL 1.4 LUJ/A14NET (2009)
- Corsa-D 1.0 A10XEP 1.2 A12XEL 1.2 A12XER 1.4 A14XEL - 1.4 A14XER - 1.2 A12XER 1.4 A14NEL (2009)
- Insignia 1.4 LUJ/A14NET (2011)
- Meriva-B 1.4 LDD/A14XER 1.4 LUJ/A14NET 1.4 LUH/A14NEL (2010)
- Mokka 1.4 LUJ/A14NET (2012)
- Zafira-C Tourer 1.4 LUJ/A14NEL 1.4 LUJ/A14NET (2011)
- Aveo 1.2 L2Q/A12XEL 1.2 LDC/A12XER 1.2 LWD/A12XEL 1.4 LDD/A14XEL 1.4 LDD/A14XER (2011)
- camshaft sensor disc setting tool to be used as OEM EN-49977-100
- intake camshaft adjusting tool to be used as OEM EN-49977-200
- camshaft sensor positioning tool to be used as OEM EN-49978
- chain tensioner pin 4 mm to be used as OEM KM-955-1
- belt tensioner pin 2.5 mm to be used as OEM KM-955-2
- 2 camshaft locking tools to be used as OEM KM-952 / 953-A



Item #
8857

## Engine Timing Tool Set | for Opel Vectra, Signum, Zafira

- for checking the timing on engine 2.2 l 16V engines with timing chain

### suitable for the following Opel models:

- Astra G (2000 - 2006)
- Speedster (Vauxhall) VX220 (2000 - 2006)
- Vectra B, C (2000 - 2008)
- Signum (2003 - 2008)
- Zafira A, B (2000 - 2008)
- with engine codes: Z22SE, Z22YH
- camshaft locking tool, to be used as OEM KM-6148
- locking pin for chain tensioner, to be used as OEM KM-6077, Saab 8396392
- crankshaft counterholder, to be used as OEM Opel KM-J-38122-A, KM-956-1, Alfa 2192261000
- water pump locking tool, to be used as OEM Opel EN-43651, KM-J-43651, Alfa 2000012000



Item #
62506



## Engine Timing Tool Set | for Opel (Vauxhall), Saab, Chevrolet 2.0I / 2.4I

- for adjusting engine timing when replacing timing chain, etc.
- suitable for 2.0 L & 2.4 L twin cam turbo charged petrol engines

### suitable for the following models:

- Vauxhall (Opel) Astra, Insignia, Antara
- Chevrolet Captiva, HHR, Malibu
- Saab 9-5


### with engines:

- OPC, OPC/VXR, Turbo, E85, Turbo T-Bi

### engine codes:

- 2.0L > LHU, A20NFT, LTG, A20NHT, LDK, A20NHT
- 2.4L > A24XE, A24XF, LE5, LE9
- crankshaft pulley alignment tool, to be used as OEM EN-48585
- flywheel holding tool, to be used as OEM EN-43653, J43653
- tensioner retaining pin 2.5 mm, to be used as OEM EN-955-10, KM 955
- tensioner locating pin 4.0 mm, to be used as OEM EN-955-20, KM 955-20
- tension plunger resetting tool, to be used as OEM EN-45027-1, J-45027-1
- tension plunger holder, to be used as OEM J45027-2, EN45027-2, EN-45027
- camshaft locking tool (left side), to be used as OEM EN-49212, EN-49212-1
- camshaft locking tool (right side) to be used as OEM EN-49212, EN-49212-2
- camshaft adjuster holding tool, to be used as OEM EN-48953



Item #	
9394	 <b>1/3</b>

## Engine Timing Tool Set | for Opel, Chevrolet 2.0 CDI

- suitable for 2.0L common rail diesel engines with codes: Z20DM, Z20DMH, LLWZ20DMH, RA420, Z20Si, Z20S3, Z20S4, Z20S5
- for changing the timing belt and checking the engine timing
- holds camshaft and crankshaft in the correct position
- camshaft locking tool to be used as OEM EN-48245
- crankshaft locking tool to be used as OEM EN-48246

Item #
66202



## Camshaft Locking Tool Set | for VAG, Ford, Opel, Saab

- all purpose set for many models

### scope of delivery:

- camshaft locking tool for Opel Calibra, Omega, Sintra, Vectra -1.8 / 2.0, to be used as OEM KM-852, 18G1570
- camshaft locking tool for Opel Calibra, Omega, Sintra, Vectra -1.4 / 1.6, to be used as OEM KM-853
- locking tool for right camshaft for Saab 900, 900 -2.5 / 3.0, Opel Calibra, Sintra, Vectra -2.5/3.0, to be used as OEM KM-800-2
- locking tool for left camshaft for Saab 900, 900 -2.5 / 3.0, Opel Calibra, Sintra, Vectra -2.5/3.0, to be used as OEM KM-800-1
- crankshaft toothed belt wheel locking tool for TDI pump injection engines for VW, Skoda, Seat and Ford, to be used as VAG T10050
- flywheel locking tool for Citroen, Fiat and Peugeot, to be used as OEM 153A, 6012T, 9765.54
- flywheel holding tool for Isuzu 1.5 and 1.7 diesel, Opel 1.6 / 1.7 diesel engines, Opel 1.2 / 1.4 / 1.6 / 1.8 / 2.0 OHC petrol engines, to be used as OEM KM-517-B



Item #	Description
1775	Camshaft Locking Tool Set   for VAG, Ford, Opel, Saab
1769	Camshaft Locking Tool   for Opel Astra, Vectra, Omega, Frontera, Sintra
1770	Camshaft Locking Tool   for Opel Astra, Corsa, Vectra
1775-LEER	Empty Case for BGS 1775

## Water Pump Wheel Holder | for Opel Ecotec Engines

- suitable for Opel engines 2.2 L 16V / Z22SE
- holds the timing chain and gear in place while removing and installing the water pump on GM Ecotec engines
- holding the sprocket prevents loss of timing or damage to the engine
- special half-moon design allows easier access to the water pump gear bolts
- uses access cover bolts to hold the tool in place



Item #
8420

## Camshaft Locking Tool | for Opel 1.6 / 1.8 I

- contains important tools for controlling and adjusting the engine timing
- suitable for Opel Astra G/H, Corsa D, Insignia, Meriva, Signum, Tigra, Vectra C, Zafira B (2003-2012) with engine codes A16LET, A16XER, Z16LEL, Z16LER, Z16LET, Z16XE, Z16XE1, Z16XEP, Z16XER, Z18XER, A18XER
- also suitable for Alfa Romeo 159, Fiat Croma with engine code 939A4.000
- camshaft locking tool, to be used as OEM KM-6340, EN-6340, 2000012100
- tensioner locking pin, to be used as OEM KM-6333, EN-6333



Item #
8721



## Water Pump Adjusting Wrench | for Opel

- for turning the water pump, adjusting the timing belt tension
- suitable for Opel OHC petrol engines e. g. 1.2-1.3-1.4-1.6 l
- 12.5 mm (1/2") drive



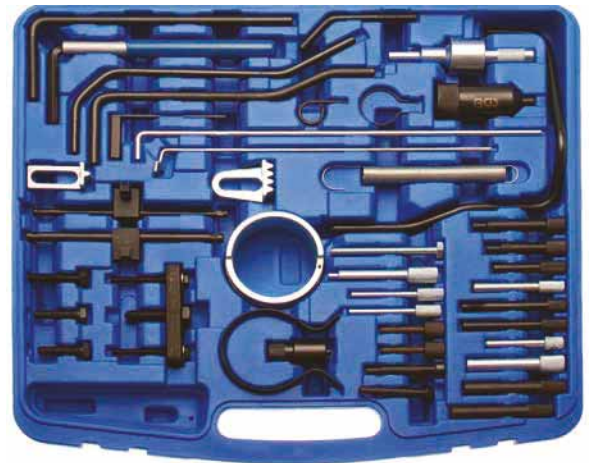
Item #	Description
8971	Water Pump Adjusting Wrench   for Opel   39 mm
8972	Water Pump Adjusting Wrench   for Opel   41 mm
8973	Water Pump Adjusting Wrench   for Opel   46 mm



## Engine Timing Tool Set | for Peugeot, Citroen (PSA)

- for setting and checking the engine timing
- **suitable for the following car models:**
  - Citroën AX, Berlingo, BX, C5, C15, C25, Dispatch, Evasion, Jumper, Jumpy, Relay, Saxo, Synergie, Visa, Xsara, Xantia, XM, XJR, ZX, etc.
  - Peugeot 106, 205, 306, 405, 406, 605, 806, J5, Boxer, Expert, Partner, Solara, Talbot Expres, Talbot Horizon, etc.
  - PSA gasoline engines 1.9 - 1.1 - 1.4 - 1.6 - 1.8 - 1.9 - 2.0 - 1.6 - 1.8 - 2.0 - 2.2 16V (turbo and twin camshaft)
  - PSA diesel engines 1.4 - 1.5 - 1.7 - 1.8 - 1.9 - 2.1 - 2.5 D / TD / TDI - 1.4 - 1.6 - 2.0 - 2.2 HDI
- also suitable for identical engines in Fiat, Ford, Nissan, Renault, Rover, Toyota, etc.

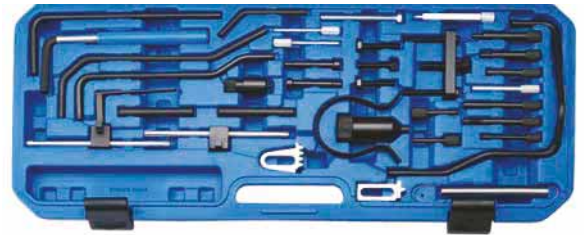
Item #
8850



Engine Timing

## Engine Timing Tool Set | for PSA

- for adjusting the engine timing while e. g. replacing the timing belt
- suitable for the following models:
  - Citroen, Peugeot 16V petrol engines, e.g. 1.8 / 2.0 16V with engine code EW (XU + TU) (incl. HPI engine) e.g. C5, 206, 306, and 406
  - Citroen, Fiat, Peugeot, Toyota 1,9D / 2,0D / 2,2D, engine code DW8 / DW10 / DW12 HDI (XUD+TUD)
  - also suitable for similar types of engine in Toyota and Fiat
- 8 camshaft locking pins, to be used as OEM 0189-L, 7014-TM, 5711-TC, 9041-TZ, 0132AJ2, 0188M, 4533-TAC2, 0132-AB, 4527-TS2, 5711-TD
- 2 camshaft / crankshaft locking pins, to be used as OEM 0132R, 4507-TB, 9767.27
- 1 crankshaft-ribbed drive puller, to be used as OEM 0188P/P2, 7015T
- 11 crankshaft locking pins, to be used as OEM 0153N, 0188D, 0188Y, 0288D, 7099-TM, 0118X, 0189-B, 0188-H, 0132AJ2, 4533TAC1, 0189-A, 0189AZ, 0118X, 0132Q, 5711-TA, 7017-TR, 0153G, 0153Y, 0153N, 0188D
- 2 flywheel locking tools, to be used as OEM 0132QZ, 4507-TA, 0189-C
- 2 flywheel locking tools, to be used as OEM 0134AF, 0188F, 9044-T, 0153A, 6012T, 9765-54, 9044
- 1 injection pump adjusting pins, to be used as OEM 4527-TS1
- 1 adjusting pin, to be used as OEM 0194B
- 1 drive belt retaining clip, to be used as OEM 0132.AK, 0153-AK, 0187-J, 0188-K, 4533-TAD
- 4 clamping tools, to be used as OEM 7017-TW, 188J2, 0178E, 5711TE, 0178J/J2, 4507-TJ, 0132X, 0132X1Z, 9767.89

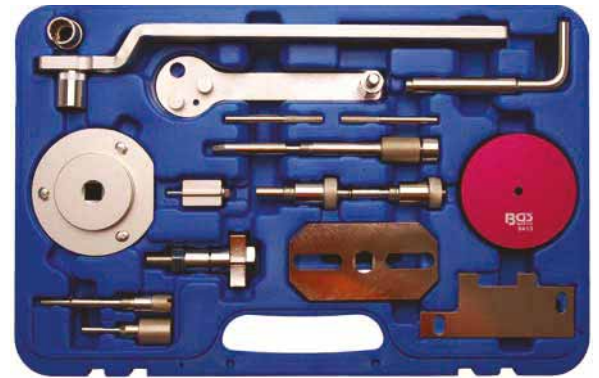


Item #	Description
8152	Engine Timing Tool Set   for PSA
8152-19	Crankshaft Locking Tool   for Peugeot, Citroën   for BGS 8152
8152-30	Crankshaft Locking Tool   for Peugeot, Citroën   for BGS 8152



## Engine Timing Tool Set | for Fiat, PSA

- for adjusting the engine timing
- suitable for Fiat engines: 2.2 JTD 4HV - 2.3 JTD F1AE0481D 120HP - 2.3 JTD F1AE0481D 127HP - 3.0 JTD
- suitable for PSA engines: Puma 22DT 4HV 100HP - Puma 22DT 4HV 120HP - F30DT
- crankshaft sealing ring installation and extraction tool to be used as OEM 2000016900, 303-679 / 303-679A, 0198D
- crankshaft locking tool, to be used as OEM 2000018700 303 -1587
- holding/turning tool for crankshaft, to be used as OEM 2000018400 / 2000010000, 303-1177
- flywheel locking tool, to be used as OEM 2000019200
- centring tool control casing, to be used as OEM 2000017000, 303/-682, 0198G
- crankshaft locking pin, to be used as OEM 2000017100, 303-698 / 21-251, 0198A
- camshaft locking pin, to be used as OEM 2000016500, 0198.B2
- holding and turning tool, to be used as OEM 1860815000, 0191-2K
- oil pump gauge, to be used as OEM 2000016700, 303-705 / 303-1093, 0198H
- water sensor tool, to be used as OEM 2000017300
- flywheel locking tool, to be used as OEM 1860846000
- crankshaft locking pin, to be used as OEM 99360615, 2000018200, 0191-2A
- camshaft locking tool, to be used as OEM 99360614, 0191-2B
- camshaft locking tool, to be used as OEM 1860617000, 2000018200



Engine Timing

Item #
8413

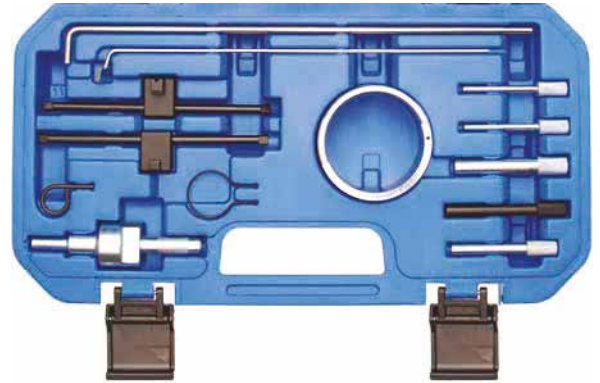
## Engine Timing Tool Set | for PSA 1.8, 2.0 16V Petrol

- contains important tools for checking and adjusting the engine timing after replacing the timing belt and engine repairs

### suitable for the following models:

- Citroen C5 1.8/2.0 HPi (2002 - 2005) Xsara 2.0 16V (2002 - 2005) Xsara, Picasso 1.8/2.0 16V (2002 - 2005)
- Peugeot 406 1.8 16V (2000 - 2004), 807 2.0 16V (2002 - 2005)
- engine codes 6FZ (EW7J4) FRN (EW10J4 / L4 / 5) RLZ (EW10D)

- tensioner locking tool, to be used as OEM 0189S2
- tool for tensioner, to be used as OEM 0178E, 5711TE, 178J/J2
- tool for tensioner, to be used as OEM 0188J2
- adjustment tool for clamping unit, to be used as OEM 0189S1
- locking pins, to be used as OEM 0132AB / 0194A / 0178D
- locking pin, to be used as OEM 0194B
- locking pin, to be used as OEM 0188M
- locking pin, to be used as OEM 0189B
- flywheel locking tool, to be used as OEM 0189R
- locking tool for tensioner, to be used as OEM 7017TR / 0153U
- adjustment tool for crankshaft wheel, to be used as OEM 0188AH



Item #
62622

## Engine Timing Tool Set | for Peugeot, Citroën 1.0, 1.2 Vti

- for checking / adjusting the engine timing
- is required for working on the camshaft drive, renewing the cylinder head gasket, etc.

### suitable for the following models with 1.0/1.2VTi engines:

- Peugeot 208 / 2008 (2012 to 2014)
- Citroen C3 (III)
- engine codes EBO (ZMZ), EB2 (HMZ)
- flywheel locking tool, to be used as OEM 0109-2B
- camshaft adjustment tool, to be used as OEM 0109-2A

Item #
8978



## Engine Timing Tool Set | for Fiat Ducato, Peugeot Boxer, Citroën Jumper 2.3 D JTD, 3.0 JTD, HDi

### suitable for the following models:

- Citroën Relay/Jumper III
- Fiat Ducato
- Iveco Daily (03-10), Daily/EcoDaily (09-11)
- Peugeot Boxer III (06-12)
- 2.3D, 2.3 JTD F1AE0418A, F1AE0481B, F1AE0481C, F1AE0418D, F1AE0481F, F1AE0481FA, F1AE0481G, F1AE0481H, F1AE0481HA, F1AE0481N, F1AE0481UA, F1AE0481VA
- 3.0JTD F1CE0481A, F1CE0481B, F1CE0481D, F1CE0481F, F1CE0481H, F1CE3481M
- 3.0HDi F30DTE, F1CE0481D, F1CE3481DM, F1CE3481N

- 2 camshaft locking pins
- 1 crankshaft locking pin
- 2 camshaft locking pins
- 1 crankshaft locking pin

- to be used as OEM Fiat 99360187, 99360614, 99360615, 1860617000, 1860815000, 20000180200 / Citroën /Peugeot 0191-2A, 0191-2B, 0191-2J, 0191-2K



Item #
8422



## Engine Timing Tool Set | for Rover, Peugeot, Ford, Volvo 2.0, 2.2l D

- allows inspection and adjustment of engine timing

### suitable for the following models:

- Peugeot 807 (05-11), 407 (05-11), 607 (05-09), engine DW10UTED4 (RHK), DW10BTED4 (RHR)DW12BTED4 (4HS), (4HP), (4HT), (4HR)
- Citroën C4 (04-10), C5 II (04-10), engine DW10BTED4 (RHR)
- Land Rover Freelander (06-10), engine DW12BTED4, 224DT
- Volvo S40 (03-10), V50 (06-10), C70 (06-10), S80 (07-10), C30 906-10), V70 (07-10), engine D420T 2.0D
- Ford S-Max 2.2 (08-10), Galaxy 2.2 (08-10), Mondeo 2.2, 2.0 (07-10)
- engine codes: QXBA(2.2), QXWA(2.0), QXBB(2.0), Q4BA(2.2), QXWA(2.0), QXWB(2.0), AZBA(2.0), AZBC(2.0), AZWA(2.0)

- camshaft locking tool, to be used as OEM PSA 0188.M, Ford 303-735, 303-1277, Volvo 999-7122
- crankshaft locking tool, to be used as OEM PSA 0188.X, Ford 303-1059, 303-1270, Volvo 999-7121
- flywheel locking tool, to be used as OEM PSA 0188.F, Ford 303-393A (303-393-01, 303-1272, Volvo 999-7119/7120)



Item #
8529

## Engine Timing Tool Set | for PSA 2.5, 2.8 l Diesel

### suitable for the following models:

- Citroen, Peugeot, Fiat, Iveco Traffic (80-00), Master (80-07), Mascot (99-07)
- Fiat, PSA, Renault Daily (91-05), Turbo Daily (94-00), Relay / Jumper (01-02) Boxer (00-06), Arena (97-01), Movano (98-03)
- 2 locking pins
- flywheel locking pin
- holding tool for timing belt tensioner
- to be used as OEM Fiat 1 870 667 000, 1 870 765 001, 1 860 617 000 / Renault MOT861, MOT1054, MOT863 / Opel KM6031 / Ford 21-260, 303-732 / Peugeot 0132AB, 5711TD, 4527TS2, 0178D, 0194A, 119790 / Citroen 0132AB, 5711TD, 4527TS2, 0178D, 0194A, 119790 / Mazda 49 JE 02018, 0991246510 / Volvo 999-7169



Item #
8418

## Camshaft Locking Tool | for 1.3l PSA Diesel

- for holding the camshaft when loosening and tightening the camshaft sprocket bolts
- required for works on camshaft drive
- suitable for Citroën, Peugeot, Fiat, Ford, Alfa Romeo 1.3 JTD
- recommended add-on for use with timing tool set BGS 8669
- to be used as Ford OEM 303-1475 / Fiat OEM 1871008600



Item #
9146

## Engine Timing Tool Set | for Porsche Boxster, 911

- for checking the engine timing

### suitable for the following Porsche models:

- Porsche Boxster (986 / 987) 2.5L (as of 1998), 2.7L (as of 2000), 3.2L (as of 2000)
- Porsche 911 (996 / 997) 3.6L (as of 2002), 3.4L (as of 2002)

- push pin / extension, to be used as OEM 9602
- aligning tool, to be used as OEM 9608
- TDC setting pin, to be used as OEM 9595
- camshaft locking tool, to be used as OEM 9612
- camshaft support, to be used as OEM 9611
- camshaft holding tool, to be used as OEM 9634



Item #
8836

## Tool Tray 1/3: Engine Timing Tool Set | for Porsche Panamera, Cayenne V8 | 8 pcs.

- to check and adjust the camshaft timing
- is required when changing the cylinder head gasket, replacing the camshaft, etc.
- camshaft gauges suitable for Panamera / Cayenne as of 2008, to be used as OEM 9678/1
- camshaft gauges suitable for Cayenne, to be used as OEM 9678
- auxiliary chain tensioner suitable for Cayenne as of 2008, to be used as OEM 9683/1
- 27 mm socket, 10 mm (3/8") drive, 30 mm length, suitable for Cayenne, to be used as OEM 9714
- crankshaft aligning tool, to be used as OEM 9595/1



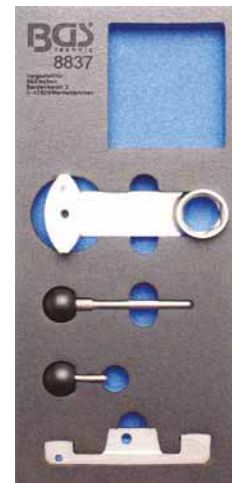
Item #	Description
8835	Tool Tray 1/3: Engine Timing Tool Set   for Porsche Panamera, Cayenne V8   8 pcs.
8835-1	Tool Tray 1/3, empty   for Item 8835



## Engine Timing Tool Set | for Porsche 911 (996, 997)

- to check and adjust the camshaft timing
- is required when renewing the cylinder head gasket, changing the camshaft, etc.
- 1 camshaft holding tool, suitable for engine M96/03, to be used as OEM 9685
- 1 camshaft locking tool, suitable for engines M97/01 & M96/03, to be used as OEM 9686
- 2 locking pins, suitable for engines M97/01 & M96/03, to be used as OEM 9595 / 9595/1

Item #	
8837	



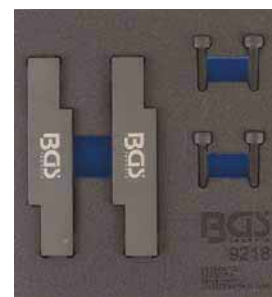
## Engine Timing Tool Set | for Porsche Macan 3.0S / 3.6 Turbo

- is required when changing the timing chain, replacing the cylinder head gasket, etc.
- supplementary set to BGS 8835

### suitable for the following models:

- Porsche Macan 3.0S / 3.6Turbo
- engine codes: MCT.M / MCT.L
- camshaft alignment tools, to be used as OEM 9861

Item #	
9218	





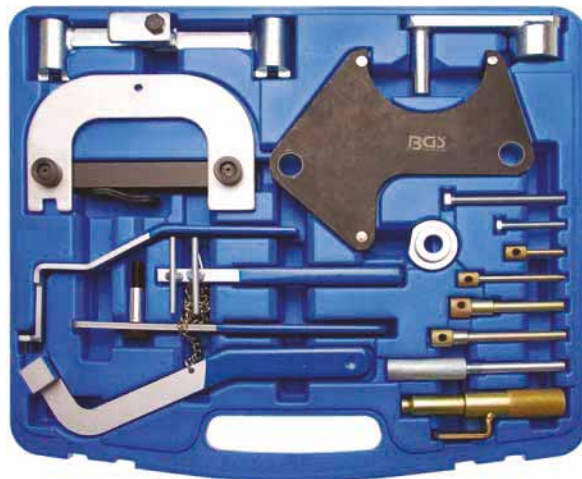
## Engine Timing Tool Set | for Renault

- flywheel - crankshaft locking tools
- tools for adjusting the camshaft, pumpshaft
- fuel injection pump shaft
- pulling off the crankshaft pulley
- tensioning the timing belt
- includes adjusting gauge for camshaft, crankshaft, pumpshaft
- to be used as OEM tools MOT1348, MOT1312, MOT1135 -01, MOT1384, MOT1337, MOT1496, MOT910-1, MOT910, MOT861, MOT863, MOT1054, MOT1318, MOT1489, MOT1340, MOT1386, MOT1490, MOT1490-1, KM6031

### suitable for the following Renault models:

- petrol 1.4, 1.6, 1.8, 2.0 l, each with 16 valves
- 2.5 l 20V with double camshaft
- petrol 1.2, 1.4, 1.6, 1.7, 1.8, 2.0, 2.2 l
- diesel 1.9, 2.5, 2.8 l
- also to be used for Opel Arena/Movano and Volvo V/S 40

Item #	Description
8154	Engine Timing Tool Set   for Renault
8154-1	Camshaft Tool for Renault   for BGS 8154
8154-2	Crankshaft Locking Tool   for Renault   for BGS 8154
8154-4	Flywheel Fastening Clips   for Renault   for BGS 8154
8154-11	Camshaft Locking Tool   for Renault 1.4 / 1.6 16v   for BGS 8154
8154-15	Clamping Tool   for Renault   for BGS 8154
8154-LEER	Empty Case for BGS 8154



## Engine Timing Tool Set | for Renault, Opel, Nissan | 12 pcs.

- for positioning and locking the crankshaft and camshaft when repairing the timing belt and engine

### suitable for the following models:

- Renault Avantime (2005 - 2007) - Clio (2001 - 2008) - Espace (2000 - 2008) - Kangoo (2000 - 2008) - Laguna (1999 - 2001) - Laguna II (2004 - 2007) - Master (2000 - 2006) - Megane (1999 - 2008) - Modus (2004 - 2008) - Scenic (1999 - 2008) - Traffic (2001 - 2008) - Twingo (2007 - 2008)
- Nissan Almera N16 (2002 - 2006) - Interstar (2002 - 2006) - Kubistar (2003 - 2008) - Micra K12 (2003 - 2008) - Note (2006 - 2008) - Primastar (2002 - 2007) - Primera P12 (2003 - 2007) - Qashqai (2008 - 2009)
- Opel Movano (2000 - 2008) - Vivaro (2001 - 2008)
- engine codes: 1.5 (K9K), 1.9 (F9Q), 2.2 (G9T), 2.5 (G9U)
- inlet camshaft locking tool to be used as OEM KM6205 (MOT1534)
- exhaust camshaft locking tool to be used as OEM KM6204 (MOT1537)
- injection pump locking tool to be used as OEM MOT1538
- 5-piece clamping tool set to be used as OEM MOT1543
- locking pin to be used as OEM MOT1430
- crankshaft locking pin to be used as OEM MOT1536



Item #
62505

## Engine Timing Tool Set | for Nissan, Renault, Opel

- for adjusting the engine timing

### suitable for the following models:

- Nissan Primaster (2008 - 2009), Qashqai (2008 - 2009), X-Trail (2007 - 2008) with engine codes M9R 780, 830, 832, 833
- Renault Koleos (2008 - 2009), Laguna (2005 - 2008), Megane (2007 - 2008), Scenic (2008 - 2009), Trafic (2007 - 2008), Vel Satis (2008 - 2009) with engine codes M9R 700, 721, 724, 740, 742, 446, 760, 761, 780, 802, 803, 805, 830, 832, 833
- Vauxhall, Opel Vivaro (2007 - 2008) with engine codes M9R 780, 782, 784
- crankshaft pulley holding tool, to be used as OEM Renault/Nissan EN-48334, Opel KM-956-1
- camshaft adjusting tool, to be used as OEM Renault MOT1769, Opel & Nissan EN-48332
- camshaft gear alignment tool, to be used as OEM Renault MOT1773, Opel & Nissan EN-48331
- crankshaft adjusting tool, to be used as OEM Renault MOT1766, Opel & Nissan EN-48330
- chain tensioner locking tool 2.96 mm
- belt tensioner locking tool



Item #
8421

## Camshaft Locking Tool | for Renault 1.8 / 2.0 16V

- for locking the camshaft gears
- to be used as MOT 1509-01, 1509
- suitable for Renault Laguna II (2001 - 2009), Megane II (2002 - 2009), Scenic (2002 - 2009)
- with engine codes 700, 701, 712, 713, 714, 715, 720, 721, 722, 722, 730, 732, 736, 738, 740, 741, 744, 746, 747, 760, 761, 762, 763, 764, 765, 766, 767, 770, 771, 773, 774, 774, 775, 776, 784, 786, 787, 790, 792, 794, 797, 830, F4P, F4R



Item #
8577

## Engine Timing Tool Set | for Renault, Opel, Volvo, Mitsubishi, Chrysler

- for adjusting the engine timing on Renault petrol and diesel engines

### suitable for the following models:

- Renault:
  - Clio (1990-2013), Espace / Grand Espace (1996-2002), Extra / Rapid / Express (1991-2002), Kangoo (1998-2009), Laguna (1994-2001), Megane (1995-2003), Scenic (1996-2003), Modus / Grand Modus II (2004-2013), Safrane (1992-2001), Trafic (1997-2000), Master II (2000-2003), Twingo (2000-2013), Wind (2011-2013)
- Opel:
  - Arena (1997-2001), Movano-A (1999-2006), Vivaro (2001-2007)
- Volvo:
  - S40 (1996-2004), V40 (1996-2004)
- Mitsubishi:
  - Carisma (2001-2005), Space Star (2000-2006)
- Chrysler:
  - Cherokee (1984-1995), Wrangler (1988-1995)

### engine codes:

- E7F 1.2: 700, 704, 706, 708, 750
- D4F 1.2 16v: 702 / 704 / 706 / 708 / 712 / 714 / 716 / 722 / 728 / 730 / 740 / 742 / 764 / 772 / 780 / 782 / 784 / 786
- E7J 1.4: 601 / 624 / 626 / 634 / 635 / 710 / 711 / 716 / 718 / 719 / 754 / 756 / 757 / 764 / 780
- F3P 1.8: 674 / 676 / 678 / 710 / 712 / 714 / 720 / 724 / 755 / 758 / B670 / Q7 / R7 / S724
- F7P 1.8 16v: 720 / 722
- F8Q 1.9D/Di/Turbo: 600 / 606 / 620 / 622 / 624 / 630 / 632 / 644 / 646 / 648 / 662 / 672 / 676 / 678 / 680 / 682 / 684 / 692 / 696 / 714 / 722 / 724 / 730 / 732 / 776 / 784 / 786 / 788 / 790 / B640
- F9Q 1.9D dTi: F9Q1 / F9Q2 / 710 / 716 / 717 / 720 / 722 / 730 / 731 / 734 / 736 / 744 / 760 / 762 / 770 / 774 / 780 / 782 / 790 D4192T / D4191T2 D4192T3 / D4192T4
- F3R 2.0: 611 / 722 / 723 / 742 / 750 / 751 / 752 / 768 / 769 / 791 / 796 / 797 / 798
- J7R 2.0: 732 / 733 / 734 / 735
- F7R 2.0 16V: 700 / 714 / D710
- J7T 2.2 16V: 760 / 761
- G8T 2.2D/Turbo: 706 / 714 / 716 / 740 / 752 / 760 / 790 / 792 / 794

- camshaft locking tool, adjustable for DOHC engines
- high pressure diesel pump locking pin, to be used as OEM Mot.910
- tensioner spanner, to be used as OEM Mot1135-01
- crankshaft locking pin, to be used as OEM Mot.1318
- crankshaft locking pin, to be used as OEM Mot.1054
- crankshaft locking pin, to be used as OEM Mot.910



Item #
9367

## Engine Timing Tool Set | for Renault, Volvo, Ford 16V, 20V Petrol Engines

- contains important tools for adjusting the engine timing
- 1.6 - 1.8 - 1.9 - 2.0 - 2.3 - 2.4 - 2.5 l DOHC engines

### suitable for the following models:

- Renault Laguna (built 1996 - 1999), Safrane (built 1996 - 2001) with the engine codes: N7Q 704, 710, 711 N7U 700, 701
- Ford Kuga (02/2008- ), Focus ST RS (07/2004-), S-Max (03/2006-), Galaxy (03/2006-), Mondeo (02/2007-) with the engine codes: JZDA, HYDB, HYDC, HUWA
- Volvo 850 (built 1992 - 1997), C70 (built 1998 - 2002), S40 (built 1996 - 2004), V40 (built 1996 - 2004), S60 (built 2001 - 2005), S70 (built 1997 - 2000), S80 (built 1999 - 2005) with the engine codes: B4164 S/S2, B4184 S/S2/S3/S9/S10, B4194 T/T2, B4204 S/S2/T/T2/T3/T5, B5202 FS, B5204 FT/T2/T3/T4/T5, B5234 T3/T4/T5/T6/T7/T8/T9, B5244 S/S2/SG/SG2/T3/T4/T5/T7, B5252 FS, B5254 T/T2/T4
- camshaft locking tool, to be used as OEM MOTMOT1337, 999-5452, 303-1178
- tensioner pulley wrench, to be used as OEM MOT1348
- flywheel locking tool, to be used as OEM MOT1340, 999-5451, 303-1182



Item #
8417

## Engine Timing Tool Set | for Renault 1.5, 1.9 DCI

- for changing the timing belt
- suitable for Renault Laguna, Kangoo, Clio with 1.5, 1.9 DCi-engines
- crankshaft locking pin, to be used as OEM MOT 1489
- camshaft / crankshaft timing pin, to be used as OEM 0194B, 999-7122, 21-263, MOT 1430, 0187B, 0189B, 607589011500
- TDC timing pin, to be used as KM603 OEM, MOT 1054 MOT 861 MOT 863

Item #
8145



## Locking Tool for Injection Pump Sprocket | for Renault

- for locking the injection pump sprocket for timing belt replacement and other works when dismantling of the timing belt is required
- suitable for the following models: Renault Clio, Megane, Laguna, Kangoo with 1.9 TDi, engine code: F9Q
- to be used as OEM 1200-01

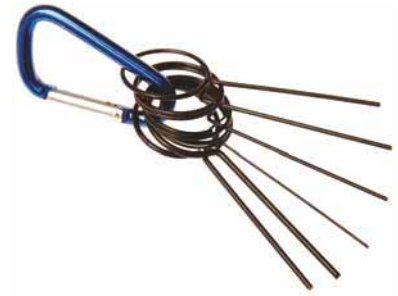
Item #
8407





## Locking Pin Set | for automatic Belt Tensioner

- suitable for locking belt tensioners
- locking pin Ø 1.9 - 1.7 - 1.5 - 1.4 - 1.25 - 0.8 mm
- length of pins: 47 mm
- made of spring steel
- on aluminum hook



Item #
8438



## Tool Tray 3/3: Engine Timing Tool Set | for Renault, Nissan, Opel, Volvo

- for checking and adjusting the engine timing

### suitable for the following models:

- Renault: Clio 1-2-3-4, Clio Sport 1-2-3, Mégane 1-2-3, Master 1-2, Mégane Scénic 1-2-3, Vel Satis 1-2, Avantime, Kangoo 1-2-3, Laguna 1-2-3, Espace 1-2-3, Trafic 1-2, Wind, Modus, Twingo, Koleos
- Dacia: Logan, Duster, Sandero, Dokker
- Nissan: Note, Qashqai, Micra, Interstar, Primastar, Kubistar, Almera, Primera
- Opel: Vivaro, Movano
- Volvo: S 40, V 40

### suitable for gasoline and diesel engines:

- 1.2 - 1.2 16V - 1.4 - 1.4 16V - 1.5DCI - 1.6 - 1.6 16V, 1.6D - 1.7 - 1.8 - 1.8 16V - 1.9TD - 1.9 - 1.9DCI, 1.9DTI - 1.9CDTI - 2.0 - 2.0 16V - 2.1TD - 2.2, 2.2DCI - 2.2DTI - 2.2TD - 2.5DCI - 2.5CDTI - 2.5TD - 2.8D
- camshaft locking tools, to be used as OEM MOT 1496, MOT 1750, MOT 1337, MOT 1534, KM-6205, MOT 1537, KM-6204
- camshaft gear adjusting tool, to be used as OEM MOT 1490-01
- crankshaft locking pins, to be used as OEM MOT 1054, KM-6031, KV113 B0280, MOT 1489, KV113 B0130, MOT 1340, MOT 910, MOT 1318, MOT 1489, MOT 1337, MOT 1536, KM-6203, MOT 1054
- tensioning tools, to be used as OEM MOT 1348, MOT 1312, MOT 1384, MOT 1135-01, MOT 1543, KM-6234, KV113 B0360, MOT 1386
- screw M6 x 45 mm
- screw M8 x 80 mm
- high pressure injection pump locking pins, to be used as OEM MOT 1538, MOT 1200-01



Item #
4134





## Tool Tray 3/3: Engine Timing Tool Set | for Fiat, Ford, Citroën, Peugeot

- for adjusting the engine timing when renewing the tooth belt, replacing the cylinder head gasket, etc.

### suitable for the following models:

- Fiat Ulysse, Scudo, Ducato
- Lancia Zeta, Phedra
- Ford Fiesta, Fusion, Focus, Focus C-Max
- Citroen C15, C1, C2, C3 Pluriel, C4, C4 Picasso, C5, C6, C8, DS3, DS4, DS5, Xantia, Xsara, Xsara Picasso, Evasion, Berlingo, Jumpy, Jumper, Saxo, ZX, XM, Evasion, AX
- Peugeot 107, 1007, 206 cc, 207, 208, 306, 307 cc, 308, 406, 407, 508, 607, 806, 807, Partner, Expert, Boxer, 206, 106, 605, 205, 405
- Lancia / Fiat 2.0 & 2.2 JTD

### suitable for engines:

- DW12TED4 (4HW), DW10ATED (RHT/RHV/RHW/RHX/RHZ)
- Ford 1.4 / 1.6 Duratorq TDCI  
Motorcodes: F6JA, F6JB, F6JC, G8DA, G8DB, HHDA, HHDB, HHJA, HHJB
- Citroen / Peugeot 1.0 / 1.1 / 1.4 / 1.6 / 1.6 16V, 1.4 / 1.6HDI / 1.8 / 1.8 16V / 2.0 / 2.0 Turbo, 1.9D / 2.0HDI / 2.2HDI / 1.8 16V / 2.0 16V
- flywheel puller, to be used as OEM 0188-P2, 0188-P, 174, 7015-T
- tensioner pulley locking levers, to be used as OEM 0188-J1, 0188-J2
- tensioner pulley locking pins, to be used as OEM 0188-Q2, 0188-AH, 0189-S2
- timing belt retaining clip, to be used as OEM 0132-AK, 0188-AK, 0189-K, 0153-AK, 4533-TAD, MOT 1436
- flywheel locking pins, to be used as OEM 0153-N, 0188-Y, 7014-TJ, 7099-TM, 9797-34, 0188-D, 7017-TM, 0132-P, 4507-TL, 7017-TR, 0153-M, 0178-C, 0178-D, 7014-TM, 9767-94, 0189-B, 21-163, 0132-AJ1, 0153-G, 0188-M, 0189-J, 4533-TAC1, 5711-TA, 0189-L, 0189-C, 0189-R, 0153-U, 7019-T, 0132-Q, 0132-QZ, 4507-TA, 9767-27, 0132-X, 0188-Q1, 4507-TJ, 9767-89
- tensioner pulley locking pins, to be used as OEM 4200-TH, 0117-AR
- tensioning tool, to be used as OEM 0178-E
- flywheel locking tool, to be used as OEM 0153-A, 6012-T, 9765-54, 0134-AF, 0134-Q, 0188-F, 9004-T
- pulley locking lever, to be used as OEM 0606-A1-A2
- tensioner pulley adjusting tool, to be used as OEM 0189-S1



Engine Timing

Item #	
4135	 

## Tool Tray 3/3: Engine Timing Tool Set | for Ford, VAG, Mazda, Volvo

- for checking and adjusting the engine timing

### suitable for the following models:

- Audi 80, A1, A2, A3, S3, A4, A5, A6, TT, Q5
- Seat Arosa, Ibiza, Cordoba, Leon, Toledo, Alhambra, Altea, Inca (99-04)
- Skoda Fabia, Octavia, Superb
- VW Lupo, Polo, Fox, Golf, Bora, Jetta, Golf Plus, Passat, Beetle, Touran, Sharan, Caddy, Caddy Maxi, Transporter, Golf VI Cabrio, Tiguan
- Ford Galaxy

### petrol engines:

- 1.2 TSI / 1.4 / 1.4 TSI / 1.6 16V / 1.2 9V-12V 3-Zyl., 1.4 / 1.6 FSi (camshaft timing chain), 1.8 / 1.8 16V / 1.8T / 2.0 16V / 2.0 FSi / TFSI (timing belt)

### diesel engines:

- 1.2 / 1.4 / 1.9 / 2.0 TDI PD, 1.9 TDI 75-90-110, 1.9 SDI 75-90-110, 1.9 TDI 105-130-150, 2.0 TDI DPF 140-170, 2.5 TDI V6
- camshaft locking & adjusting tools, to be used as OEM 3458, T30094, T10016, T10074, T10074, MP1-1312, T10098, T20038, 3418, T10123, T10121, T10120, T10252, T10171, 2065-A, 21-105
- crankshaft locking & adjusting tools, to be used as OEM 3242, T40069, T30052, T40026, T10414, T10100, T10340, T10341
- injection pump locking & adjusting tools, to be used as OEM 3359, T20102, 2064, U20003
- chain tensioner, tooth belt tensioner & drive belt tensioner tools, to be used as OEM 23-058, 310-084, T10008, 2065A, T10008, U40021, T10092, T40011, T10060, T10060A, T00115, T10264, T40098, 303-1054, T10115, T10092, T40011, T00115, T10264, T40098
- chain tensioner / crankshaft sprocket holder, to be used as OEM 3366, T20018, T20044
- crankshaft sprocket aligning tool, to be used as OEM 23-059, 310-085, T10050
- lever / wrench for tensioning the tooth belt, to be used as OEM 3387, U30009A, 2587, MATRA V.159, 3387, T10020
- locking bracket, to be used as OEM MP1-1312, T10098, T20038
- support guides, to be used as OEM OEM 3369, T30092, 3411
- TDC indicator, to be used as OEM T10170
- dial test indicator, to be used as OEM VAS6079



Item #	
4136	

## Tool Tray 3/3: Engine Timing Tool Set | for Fiat, Alfa, Lancia, Opel, Suzuki, Ford

- for checking and adjusting the engine timing

### suitable for the following models:

- Alfa Romeo 145 / 146 / 147 / 155 / 156 / 159 / 166 /
- Spider / GTV / TS / GT / Crosswagon Q4
- Fiat Punto / Grande Punto / Brava / Bravo / Marea / Weekend / Stilo / Doblo / Cargo /
- Idea / Panda / Multipla / Palio / Stilo / 500
- Lancia Lybra / Ypsilon / Thesis / Musa
- Opel Corsa / Agila / Meriva / Combo / Vectra / Zara / Astra / Insigna / Signum 1.9 CDTI
- Suzuki Ignis / Swift / Wagon R+
- Ford Ka

### engines:

- 1.2 8V / 1.2 16V / 1.4 16V / 1.6 16V / 1.6 MultiJet / 1.9 JTD / 1.9 JTD 16V / 1.9 MultiJet / 1.9 CDTI / 2.0 MultiJet / 2.4 JTD 20V / 2.4 JTD / 1.3 JTD MultiJet / 1.3 CDTI / 1.3 TDCI / 1.9 CDTI
- camshaft locking & adjusting tools, to be used as OEM 1860874000, 1860874000, 1860985000, 1825041000, 1825041000, 1825042000, 1825042000, 1860847000, 1860847000, 2000004300, 1871000900, 2000004400, 2190754400, 1870896900
- crankshaft & flywheel locking tools, to be used as OEM 1860161000, 1860905000, EN-46788, 1860771000, 1860898000, 1860863000, 1870900300, 1860703000, 2190754500, 2000004200, 2190754200, 1860905000, 2000004500, 2190754500
- injection pump adjusting tools, to be used as OEM 1860965000
- tensioning tools, to be used as OEM 1860876000, 1860987000, 1860845000, 1860876000, 1870900400
- TDC indicators, to be used as OEM 1860992000, 1895443000



Item #	
4137	 

## Tool Tray 3/3: Engine Timing Tool Set | for Fiat, Alfa, Lancia, Opel, Suzuki, Ford

- for checking and adjusting the engine timing

### suitable for the following models:

- Opel Corsa B/C / Combo / Tigra / Agila / Tigra B / Meriva / Astra F/G/H / Astravan / Speedster VX220 / Zafira A/B / Vectra B/C / Signum / Omega B / Sintra / Frontera A/B / Astravan / Kadett / Ascona / Omega / Monterey / Antara / Croma / Speedster VX220
- Chevrolet & Daewoo Epica / Captiva / Nubira / Lacetti / Evanda
- Saab 9-3 / 9-5 (98-04)
- Alfa 145 / 146 / 147 / 156 / 159 / 166
- GT / Crosswagon Q4
- Fiat Punto / Grande Punto / Bravo / Brava / Marea Weekend / Stilo / Doblo/Cargo / Multipla Idea / Panda
- Lancia Ypsilon / Musa / Lybra / Thesis
- Suzuki Ignis / Swift / Wagon R+
- Ford Ka

### engines:

- 1.0 12V / 1.0 16V / 1.2 16V / 1.4 / 1.6 / 1.2-1.4 16V (chain) / 2.0 / 2.0 Turbo / 2.2 DI / 2.0-2.2 16V / 1.6 16V / 1.8 16V / 2.0 16V / 2.2 16V / 1.3 JTD MultiJet / 1.3 CDTI / 1.3 TDCI / 1.6 MultiJet / 1.9 JTD / 1.9 MultiJet / 2.4 JTD / 1.9 CDTI / 2.0 MultiJet / 1.5 D / 1.5 TD / 1.7 D / 1.7 TD / 1.6-1.7 D / 3.0 TD / 3.1TD / 2.0-2.2-2.4 TD / 2.0-2.2 DI / 2.0 TDCI / 2.0 D VCDI / 2.2 16V (DOHC)
- adjusting wrench, to be used as OEM KM-933
- injection pump locking pin, to be used as OEM KM-927
- flywheel & crankshaft locking tools, to be used as OEM KM-929 / KM-952 / EN-46785 / KM-951 / 1860905000 / 1860905010 / EN-46788 / KM-911 / EN-46785 / 1860703000 / EN-48246 / 1870900300 / 303-1468
- tensioner tools, to be used as OEM KM-955 / KM-6130 / KM-6349 / KM-6349 / 1870900400 / 1871000200



Item #	
4138	 <b>3</b>

## Tool Tray 3/3: Engine Timing Tool Set | for Ford, VW, Seat, Mazda, Volvo

- for checking and adjusting the engine timing

### suitable for the following models:

- Ford Fiesta, Fusion, Courier, Escort, Focus, Focus C Max, Puma, Mondeo, Sierra, Cougar, Galaxy, C-Max, Orion, Tourneo Connect, Transit, Transit Connect
- VW Sharan
- Seat Alhambra
- Mazda 121
- Volvo S40, V50

### gasoline engines:

- 1.2 / 1.25 / 1.4 / 1.6 / 1.6 / 1.7 / 1.8 / 2.0 16V / 1.6 TI-VCT / 1.6 SCTI

### diesel engines:

- 1.6 Duratorq TDCI / 1.8D / 1.8TD / 1.8 DI (98-04) / 1.8 TDCI (01-04) / 1.6D / 1.9TDI / 2.5D TCI / 1.9TDI / 2.5D/TCI / 1.4TDCI / 1.6TDCI / 1.8D / 1.8TCI / 1.8TDDI / 1.8TDCI / 1.8D Turbo / 1.9TDI PD / 2.0TDCI / 2.2TDCI / 2.5D / 2.5D Turbo / 2.0 / 2.2 / 2.4 Duratorq TDCI 16V / 1.4TDCI / 1.6D 8V / 1.6D 16V

### scope of delivery:

- camshaft adjusting tools, to be used as OEM 21-105, 303-1061, 21-162B, 303-367, 303-376, 323-029
- injection pump adjusting tools, to be used as OEM 2064, 23-047, 310-055, U20003, 21-260, 303-732, 23-020, 21-238, 303-679A, 303-1151
- flywheel / crankshaft locking tool, to be used as OEM 303-1060, 0132-AB, 0178-D, 21-151, 0194-B, 21-263, 303-735, 49JE02021, 21-234, 21-251, 0194-C, 21-262, 303-734, 21-163, 303-620, 21-210, 21-123, 21-234, 21-251, 303-675, 303-698
- camshaft sprocket puller, to be used as OEM 21-229, 303-651
- feeler gauge



Item #	
4139	

## Engine Timing Tool Set | for Hyundai, Mitsubishi

- includes important tools for checking engine timing and changing timing tooth belt

### suitable for the following models:

- Hyundai 1.6 / 1.8 / 2.0 / 2.4 Twin Cams and Mitsubishi 1.8 to 3.5 16V and V6
- Mitsubishi Colt ('89-'95), Lancer ('89-'95), Carisma ('96-'05), Galant 93-03, Sigma ('91-'96), Eclipse-91-95, 300DTG ('93-'00), Space Star ('99-'06) with engines 1.8 16V GDI (4G63, 4G94); 2.0 16V GDI (4G63, 4G94, 6A12) 2.4 GDI (4G64, 4G69); 3.5 GDI V6 (6G74) 2.5 V6 (6G73, 6A13); 3.0 V6 (6G72)
- Hyundai Lantra ('91-'96), Sonata ('93-'01), Trajet ('00-'05), Santa Fe 6.1
- with engines G4-N, G4-CP, 4JP, G4-P-, G4-R-, G4-JS

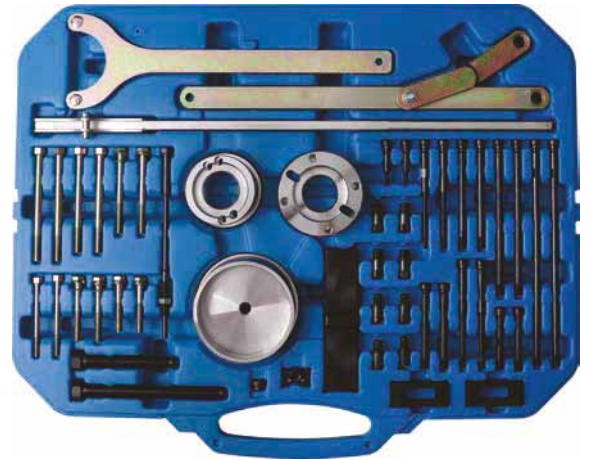


Item #	
8530	



## Engine Timing Tool Set | for Toyota, Mitsubishi

- suitable for Toyota, Mitsubishi and identical models
- important kit when working on the engine, e.g. timing belt, basic motor settings, camshafts, etc.
- handle puller, to be used as OEM 09330-0021
- gear tool, to be used as OEM 09278-54012
- drive tool for crankshaft pulley, to be used as OEM 09223-15030
- holding tool for pulley / crankshaft, to be used as OEM 09213-54015 screws for holding tool 09213-54015
- holding tool for pulley / crankshaft, to be used as OEM 09213-14010 screws for holding tool 09213-14010
- puller C set SST, to be used as OEM 09951-50013
- cross-piece 150 mm 7, to be used as OEM 09951-05010
- slider, 2 pcs. 29, to be used as OEM 09952-05010
- bolt 100 27, to be used as OEM 09953-05010
- bolt 150 28, to be used as OEM 09953-05020
- 8 pulling arms, M5 to M8 OEM 09954-05011 to 05080
- adaptor no. 1, M10 x 1.25; 2 pcs., to be used as OEM 09555-05010
- adaptor no. 1, M10 x 1.5; 2 pcs., to be used as OEM 09555-05020
- adaptor no. 1, M12 x 1.25; 2 pcs., to be used as OEM 09555-05030
- adaptor no. 1, M12 x 1.5; 2 pcs., to be used as OEM 09555-05040
- supplement connection piece, to be used as OEM 09957-04010
- holding tool for pulley / crankshaft, to be used as OEM XB990757
- belt tensioner tool, to be used as OEM XD998738
- holding tool for pulley / crankshaft, to be used as OEM XD998767



Item #
68310

## Diesel Fuel Pump Timing Set | 10 pcs.

- for an accurate adjustment of several different fuel injection pumps e. g. Bosch VE, Kikki, Lucas, CAV-Roto, Nippon Denso
- measuring adapter for piston height adaptor M14, to be used as OEM T10170
- measuring adapter, long M8
- measuring adapter, short M8
- measuring adapter, short M10
- probe, to be used as OEM 999-5382
- extension, length 99mm
- extension, length 40.8mm
- mounting bracket (CAV)
- thread adaptor M8
- thread adaptor M10
- dial test indicator, to be used as OEM KM-571-A , 3313, VAS6079




Item #	Description
8157	Diesel Fuel Pump Timing Set   10 pcs.
8157-1	Gauge   for BGS 8157   Ø 41 mm

## Camshaft Sprocket Locking Tool Set | universal

- for locking camshaft sprockets when renewing the tooth belt
- suitable for engines with 1, 2 or 4 camshafts (V-engines), also suitable for locking between camshaft sprocket and diesel injection pump sprockets on certain diesel engines
- universal application on vehicles of the following manufacturers:
  - Audi, Alfa Romeo, Chrysler, Citroen, Ford, Honda,
  - Hyundai, Isuzu, Land Rover, Lexus, Mazda,
  - Mitsubishi, Peugeot, Renault, MG, Seat, Skoda,
  - Subaru, Toyota, Opel, Volkswagen, Volvo
- twin camshaft locking tool with short and long connecting arm
- single camshaft locking tool with short and long locking screw



Item #	
9307	 <b>1/3</b>

## Camshaft Locking Tool

- needed for tooth belt replacement and other engine timing jobs
- suitable for most Diesel and gasoline DOHC engines
- fixation by locking the camshafts against each other
- pins made of hardened steel for long tool life
- versatile applications because of 2 different arm lengths
- special knob on center arm can be turned into a place-saving position



Item #
8243

## Twin Cam Lock | for double cam motors

- can be used for toothed belt distances 13 - 180 mm - for Diesel and Gasoline engines
- locks the camshaft on the side of the fuel injection pump wheel, so that the toothed belt wheels can be correctly positioned towards the crankshaft

Item #
1799



## Pulley Holder for the High-Pressure Pump | for Opel, Renault, Nissan

- suitable for diesel engines with F9Q engine code
- in Opel, Renault, Nissan cars
- no need to disassemble the tooth belt
- pump wheel is locked securely
- pump does not need to be re-adjusted

Item #
8278



## Setting and Timing Tool for Diesel Pumps | for Renault, Mitsubishi, Opel

- for F8Q and F9Q diesel engines with adjustable pump wheel
- used in Renault Megan / Scenic / Kangoo, Mitsubishi Carisma, Opel / Vauxhall Arena, Volvo S40 / V40 etc.
- special socket with 27 mm hexagon and 1/2" drive
- setting tool with 3 x 4 mm pins to adjust the pump
- adaptor for Bosch pumps M10 to M8

Item #
8281



## TDC Finder

- for easy and accurate determination of the ignition TDC (top dead centre)
- especially suitable for vehicles which have no TDC markings
- measurement unit with magnetic holder
- connecting tube with spark plug or glow plug adaptor in 8 -10 -12 -14 -18 mm + universal cone adaptor
- 60 and 160 mm aluminium adaptor tube for deep seated spark plugs

Item #	Description
8304	TDC Finder
8304-LEER	Empty Case for BGS 8304



## Engine Timing Tool Set | for VAG

suitable for the following engines:

- 1.9/2.0 l TDI pump/nozzle
- 1.9 l TDI
- 2.5 l V6-TDI
- 3.3 l V8-TDI
- 1.2 l 3-cylinder and 1.4/1.6 l gasoline engines

important adjustment tools such as:

- setting gauge for the camshaft (e. g. VW 1.9 l TDI)
- locking tool for the timing belt (e. g. VW / Skoda 1.9 l / 2.0 l TDI pump/nozzle)
- camshaft locking tool (e.g. VW / Audi 2.5 l V6 TDI)
- adjustable tensioner wrench (universal for VW / Audi)
- injection pump locking pin (e.g. VW / Audi / Seat / Skoda)
- mounting plate for timing belt tensioner (VW / Skoda 4 cyl. TDI pump/nozzle)
- 22 mm open socket for diesel injectors
- camshaft setting tools, to be used as OEM T10123, T10120, 3458, 3418, 2065A, 3366, T10098 / 3418
- crankshaft setting tools, to be used as OEM T10121, 3242, T10050, T10100
- tensioner pulley locking pins, to be used as OEM T10060A, T10020, T10008, T40011
- injection pump locking tools, to be used as OEM 3359, 2064

Item #	Description
8155	Engine Timing Tool Set   for VAG
8155-1	Engine Timing Tool Set   for VW 1.2   2 pcs.
8155-01	Camshaft Alignment Tool   for VAG   for BGS 8155
8155-2	Special Tool for checking the Engine timing   for VAG 1.2
8155-5	Crankshaft Locking Tool   for BGS 8155
8155-6	Crankshaft Locking Tool   for VAG 6 and 8 Cylinder Engines   for BGS 8155
8155-8	Camshaft Locking Tool   for BGS 8155
8155-9	Tensioner Wrench   for VAG
8155-12	Injector Spanner   for BGS 8155
8155-15	Locking Screw   for BGS 8155
8155-16	Stud with Nut   for BGS 8155
8155-17	Fixing Pin for Tensioner Pulley
8155-18	Camshaft Alignment   for VAG   for BGS 8155
8155-19	Camshaft Locking Tool   for BGS 8155
8155-20	Injection Pump Locking Tool   for BGS 8155
8155-23	Locking Pin   for BGS 8155   Ø 2.5 mm
8155-25	Locking Tool for Engine Setting   for BGS 8155
8155-26	3-Side Wrench for Engine Timing   for VAG
8155-LEER	Empty Case for BGS 8155



Engine Timing



## Engine Timing Tool Set | for VAG 1.6, 2.0 CR TDI

### suitable for the following models:

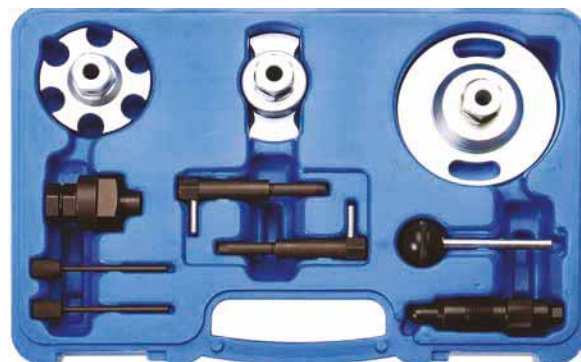
- Audi A1, A3 (8P), A4 (B8), A5A6 (C6, C7), TT (8J), Q3, Q5
- Skoda Fabia II, Roomster, Praktik, Oktavia II, Suberb II, Yeti
- Seat Ibiza (6J), Leon III, Exeo, Altea, Alhambra II
- VW Golf V, VI and Plus, Eos, Polo VJetta V and VI, Scirocco III, Beetle II, Caddy II, Passat B6, B7 and CC, Touran, Sharan II, T5, Amarok
- engine codes: CAYB, CAYC, CBAB, CBBB, CBAA, CFFB, CAGA, CAHA, CAGB, CAHB, CAGC, FCA, CAAA, CAAB, CAAC, CCHA, CAVA, CBAB, CBDA, CBDD, CBAC, CBDA, CBDC, etc.
- also suitable for earlier pump-nozzle engines
- includes important tools for checking and adjusting engine timing after e. g. timing belt replacement
- injection pump locking pin to be used as OEM T20102, U40074, 3359
- crankshaft locking tool to be used as OEM T10050, T10100
- ball end hex key 6 mm to be used as OEM T10264
- 2.5mm tensioner pulley locking pin to be used as OEM T10265
- 3.9mm tensioner pulley locking pin to be used as OEM T40098
- sprocket holding tool to be used as OEM T10051
- camshaft sprocket hub puller to be used as OEM T10052
- oil pump balancer shaft alignment tool to be used as OEM T10255



Item #	Description
66200	Engine Timing Tool Set   for VAG 1.6, 2.0 CR TDI
66200-1	Puller for Engine Setting   for VAG

## Engine Timing Tool Set | for VAG 2.7, 3.0 TDI

- suitable for Audi A4, A5, A6, AB, Q5, Q7 and VW Touareg, Phaeton with engine codes ASB, BKN, BKS, BMK, BMZ, BNG, BPP, BSG, BUG, BUN, CAMA, CAMB, CANA, CANB, CANC, CAND, CAPA, CARA, CARB, CASA, CASB, CASC, CATA, CCMA, CCWA, CCWB, CDYA, CDYB, CDYC, CEXA, CGKA, CGKB
- for locking the camshaft, crankshaft and fixing the chain tensioner
- required for timing chain replacement or engine repair
- camshaft locking pin to be used as OEM T40062
- camshaft tool to be used as OEM T40061
- rotating adaptor for crankshaft to be used as OEM T40049
- locking pin for injection pump to be used as OEM 3359
- rotating adaptor for crankshaft to be used as OEM T40058
- 2 camshaft locking tools, to be used as OEM T40060
- crankshaft locking pin to be used as OEM 3242
- 2 locking pins for chain tensioner



Item #
66205

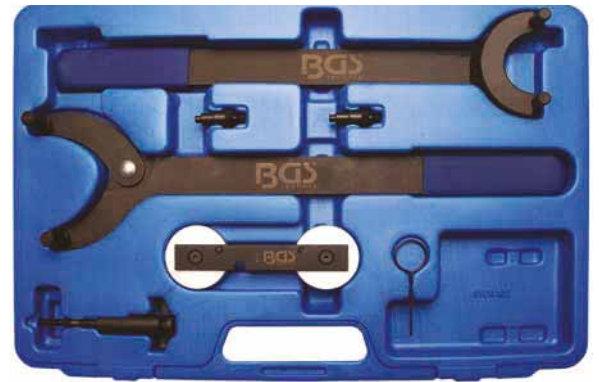


## Engine Timing Tool Set | for VAG

- suitable for 1.8 l turbo and 1.6 l FSI engines

### suitable for the following models:

- Audi:
  - A3 1.8 Turbo (AGN AGU AJQ APG APP AQA ARX ARY ARZ AUM AUQ) 1996-2003
  - A3 1.6 FSI (BAG) 2003-2006
  - S3 1.8 Turbo (AMK APY BAM) 1996
  - A4 1.8 Turbo (ADR AEB AJL AJP ANB APU AVJ AWT) 1994-2006
  - A6 1.8 Turbo (ADR AEB AJL AJP ANB APU AVJ AWT) 1994-2006
  - Cabriolet 1.8 (ADR) 1997-2000
  - TT 1.8 Turbo (AJQ APP APX AUM AUQ BAM) 1998-2006
- Volkswagen:
  - Beetle 1.8 Turbo (AVC) 1999-2006
  - Touran 1.6 FSI (BAG BLP) 2003-2007
  - Golf 1.8 Turbo (AGN AGU AQA ARZ AUM AUQ) 1997-2005
  - Bora 1.8 Turbo (AGN AGU AQA ARZ AUM AUQ) 1997-2005
  - Passat 1.8 Turbo (ADR AEB ANB APT APU ARG AWT) 1996-2005
- Seat:
  - Sharan 1.8 Turbo (AJH AWC) 1997-2007
  - Ibiza 1.8 Turbo (AQX AYP) 1999-2002
  - Cordoba 1.8 Turbo (AQX AYP) 1999-2002
  - Leon 1.8 Turbo (AJQ AQN APG APP APT ARYAUQ) 1999-2005
  - Toledo Turbo (AQN APG APT ARY AUQ) 1999-2005
  - Alhambra 1.8 Turbo (AJW AWC) 1997-2007
- Skoda:
  - Octavia 1.8 FSI Turbo (AGN AGU ARX ARZ AUM) 1996-2005
  - Octavia 1.8 Turbo 20V RS (AUQ) 2000-2006
  - Octavia 1.6 FSI (BLF) 2004-2007
- crankshaft counterholder to be used as OEM 3036
- camshaft locking tool to be used as OEM T10171
- counterholder for timing chain sprocket camshaft, vibration damper, to be used as OEM T10172
- adaptors for counterholder, to be used as OEM T10172
- holder for chain adjuster for assembly and disassembly of the chain adjuster, to be used as OEM T20018 / 3366
- fixing pin for tensioner pulley, to be used as OEM T40011



Engine Timing

Item #
8261

## Engine Timing Tool Set | for VAG 2.4, 2.8, 3.0 FSI

- for checking and setting the camshaft timing
- suitable for Audi V6, V8 and V10-engines with chain
- camshaft locking tool to be used as OEM T40070
- crankshaft locking pin to be used as OEM T40069
- chain tensioner locking pin to be used as OEM T40071



Item #
66210

## Engine Timing Tool Set | for VAG 2.5, 4.9D, TDI PD

- suitable for VW T5 as of 2004, Touareg and Phaeton since 2003 with 5-cylinder and 10-cylinder engines with engine codes: AXD, AXE, BAC, BLJ, BLK, BNZ, BPC, BPD, BPE
- camshaft locking tool for review and adjustment, suitable for 5- and 10-cylinder engines, to be used as OEM T10193
- camshaft locking tool for review and adjustment of 10-cylinder engines, to be used as OEM T10194
- clamping device for removal and replacement of the camshaft wheels of 5- and 10-cylinder engines, to be used as OEM T10199, T10199/1
- special socket for rotating the crankshaft of 5-cylinder engines, to be used as OEM T10225
- crankshaft locking wrench for 5-cylinder engines, to be used as OEM T10226
- tensioner wrench



Item #
8443

## Engine Timing Tool Set | for Audi A4, A6, A8

- suitable for Audi A4, A6, A8 with engine codes ASN, AVK, BBJ
- for timing belt replacement and repair work on the engine
- easy mounting of the belt as camshaft and crankshaft are fixed
- 2 camshaft locking tool, to be used as OEM T40030
- crankshaft locking tool, to be used as OEM T40026
- tensioner pulley wrench, to be used as OEM 3387
- socket for basic adjustment of the camshaft adjuster, to be used as OEM T40028
- pins for clamping element, to be used as OEM T40011



Item #
8299

## Camshaft Locking Tool | for VAG 5- and 10-Cylinder engines

- suitable for VW Phaeton 2003, Touareg as of 2003, Transporter as of 2004 with 5- and 10-cylinder diesel engines
- to be used as OEM T10193 or T10194
- for adjusting the camshaft when checking and repairing the engine
- no twisting of camshafts, allows precise adjustment

Item #
8279



## Tooth Belt Tool Set | for VAG

- set for working and locking the tooth belt tensioner rolls
- is needed when changing the tooth belt and during general engine repair jobs
- for the most common VW, Audi, Seat, Skoda fuel and Diesel engines
- spanners can be used as a counterholder
- no displacing of tooth belt tension when tightening the nut
- 3 tensioner pulley wrenches in different lengths and offset shapes to be used as OEM T10020, V159, 3387
- 3 locking pins for tooth belt spanners:
  - 1.6 mm used as OEM T40011
  - 2.5 mm used as OEM T03006
  - 4 mm used as OEM T10060A

Item #
8241



## Engine Timing Tool Set | for VAG | 7 pcs.

- suitable for 2.0 L FSI and TFSI engines, e. g. Golf, Touran, Audi A3, engine codes: AWA, BMB, AXW
- alignment pin, to be used as OEM T10060A
- locking pin, to be used as OEM T10115
- locking pin, to be used as OEM T40011
- chain tensioner, to be used as OEM 3366
- camshaft locking tool, to be used as OEM T10252
- tensioning screw, to be used as OEM T10092
- pin-type face wrench, to be used as OEM T10020

Item #
8219



## Engine Timing Tool Set | for VW | 5 pcs.

- for engine codes AAB, AJA, BJJ, BJK, BJL, BJM
- for VW Transporter 2.4D (95-03), Crafter 2.5TDI (06-09) and LT models
- to be used as OEM T10025, 2065A, 2064



Item #
8216

## Engine Timing Tool Set | for VAG

suitable for the following VAG models with 1.2 L 3-cylinder engines:

- Volkswagen:
  - Polo 1.2 L, 6V, 3-cylinder, engine codes AWY, BMD, BBM
  - Polo 1.2 L, 12V, 3-cylinder, engine codes AZQ, BME, BZG, CGPA, CGPB,
- Skoda:
  - Fabia 1.2 L, 6V, 3-cylinder, engine codes AWY, BMD
  - Fabia 1.2 L, 12V, 3-cylinder, engine codes AZQ, BME, BZG, CEVA, CGPA, CGPB
  - Rapid 1.2 L, 12V, 3-cylinder engine code CGPC
  - Roomster 1.2 L, 12V, 3-cylinder, engine codes BME, BZG, CGPA
  - Praktik Rapid 1.2 L, 12V, 3-cylinder, engine codes BZG, CGPA
- Seat:
  - Ibiza 1.2 L, 12V, 3-cylinder, engine codes AZQ, BME, BXV, BZG, CGPA, CGPB
  - Cordoba 1.2 L, 12V, 3-cylinder, engine codes AZQ, BME, BXV
- camshaft locking tool, to be used as OEM T10123
- camshaft locking tool, to be used as OEM T10120
- crankshaft locking tool, to be used as OEM T10121



Item #
8158

## Crankshaft Locking Tool | for VW Touareg / Phaeton from 2003

- suitable for VW Touareg manufactured before 2003, Phaeton manufactured before 2003 with 10-cylinder diesel engine
- crankshaft locking tool, for locking the crankshaft when adjusting engine timing, to be used as OEM T10195
- adjusting bolts, for mounting of the engine control module (wheels cassette), to be used as OEM T10200
- supplementary set for BGS 8443



Item #
8769



## Engine Timing Tool Set | for VAG 2.8, 3.0 TFSi

- for checking and setting the engine timing
- suitable for Audi 2.8 / 3.0 TFSi, petrol direct injection engines in Audi A6 as of 2005
- crankshaft locking pin, to be used as OEM T40069
- camshaft adjusting tool, to be used as OEM T40133
- chain tensioner locking tool, to be used as OEM T40071
- camshaft adjuster pre-tensioning tool, to be used as OEM T10172
- bolts for pre-tensioning tool (4 pcs.), to be used as OEM T10172/2
- two-pin wrench, to be used as OEM 3212
- crankshaft pulley bolt adaptor, to be used as OEM T40058
- special socket, to be used as OEM T10035



Item #		1/3
8839		

## Engine Timing Tool Set | for VAG 1.2 TSI, TFSI | 4 pcs.

- for adjusting the timing during replacement of the timing chain, renewing of the cylinder head gasket, etc.

### suitable for the following models:

- VAG 1.2 TSI/TFSI with engine codes CBZA, CBZB, CBZC
- Audi models A1 and A3
- VW New Beetle, Caddy, Golf, Jetta, Polo, Touran
- Skoda Fabia, Fabia Combi, Wildwasser, Oktavia, Roomster, Yeti
- Seat Altea, Ibiza, Leon, Toledo
- crankshaft locking tool, to be used as OEM T10340
- camshaft locking tool, to be used as OEM T10414
- guide pin, to be used as OEM-T10341



Item #
8882



## **Engine Timing Tool Set | for VAG 1.0, 1.2, 1.4**

- for adjusting and checking the engine timing

**suitable for the following VAG (EA211) engines with timing belts:**

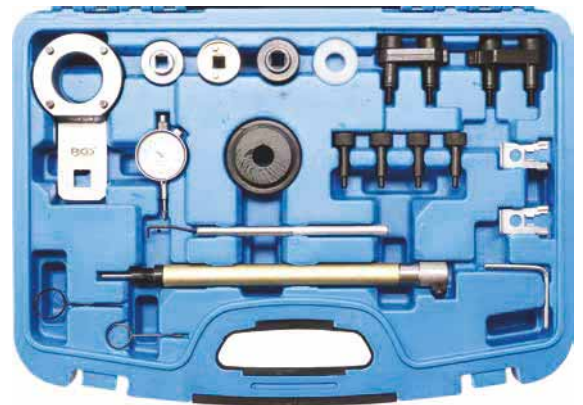
- 1.0 MPI 3-cylinder, engine codes CHYA
- 1.0 TSI 3-cylinder, engine codes CHZE, CHZC, CHZA, CHZB, CHZC, CHZD, CHZJ
- 1.2 TSI 4-cylinder, engine codes CJZB, CJZC, CYVA, CJZA, CJZD, CYVB
- 1.4 TSI 4-cylinder, engine codes CZCC, CMBA, CZCA, CHPA, CPTA (with ACT), CZDA, CVNA, CZEA (with ACT)
- crankshaft locking bolt, to be used as OEM T10340
- camshaft adjusting plate, to be used as OEM T10477
- camshaft sprocket locking tool, to be used as OEM T10476
- tensioner adjusting wrench, to be used as OEM T10499
- camshaft adjusting plate, to be used as OEM T10494
- assembly tool, to be used as OEM T10487



Item #
8922

## **Engine Timing Tool Set | for VAG 1.8 I, 2.0 FSI, TFSI**

- for checking and setting the engine timing
- suitable for 1.8 / 2.0L VAG engines with engine codes BYT, BZB, CABA, CABB, CABD, CADA, CAEA, CAEB, CAWA, CAWB, CBFA, CCTA, CCZA, CCZB, CCZC, CCZD, CDAA, CDAB, CDHA, CDHB, CDNB, CDNC, CDND, CESA, CETA, CFKA, CFPA, CGYA, CHHA, CHHB, CJBA, CJEB, CJKK, CJSB, CNCD, CPLA, CPSA
- built e.g. into Audi A4 / A5 (as of 2008) / A6 (as of 2012)
- crankshaft counterholding tool, to be used as OEM T10355
- crankshaft thrust piece, to be used as OEM T10368
- crankshaft thrust piece, to be used as OEM T10354
- camshaft locking bolts (4x), to be used as OEM T40196
- chain tensioner locking clips (2x), to be used as OEM T40267
- chain sprocket locking tools (2x), to be used as OEM T40271, T20208
- camshaft control valve tool, to be used as OEM T10352
- camshaft control valve tool, to be used as OEM T10352/1
- camshaft control valve tool, to be used as OEM T10352/2
- belt tensioner locking pin, to be used as OEM T10060A
- tensioner locking pins (2x), to be used as OEM T40011
- oil pump tensioner locking tool, to be used as OEM T40265

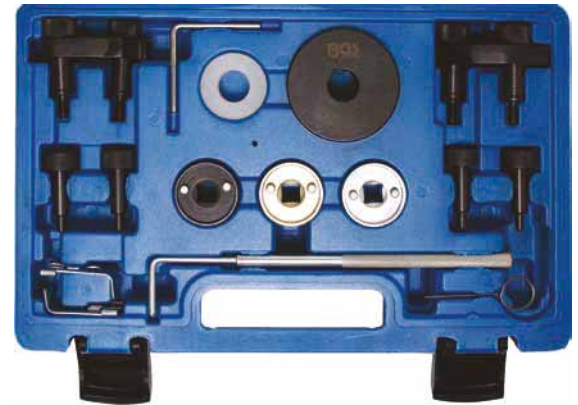


Item #
8924

## Engine Timing Tool Set | for VAG 1.8, 2.0 I FSI, TFSI

- for checking and setting the engine timing
- suitable for 1.8 / 2.0L VAG (EA888), with engine codes BYT, BZB, CABA, CABB, CABD, CADA, CAEA, CAEB, CAWA, CAWB, CBFA, CCTA, CCZA, CCZB, CCZC, CCZD, CDAA, CDAB, CDHA, CDHB, CDNB, CDNC, CDND, CESA, CETA, CFKA, CFPA, CGYA, CHHA, CHHB, CJBA, CJEB, CJKa, CJKB, CJSa, CJSB, CNCD, CPLA, CPSA
- built e. g. into Audi A4 / A5 (as of 2008) / A6 (as of 2012)

- crankshaft thrust piece, to be used as OEM T10368
- crankshaft thrust piece, to be used as OEM T10354
- camshaft locking bolt (4x), to be used as OEM T40196
- chain tensioner locking clip (2x), to be used as OEM T40267
- chain sprocket locking tools (2x), to be used as OEM T40271, T20208
- camshaft control valve tool, to be used as OEM T10352
- camshaft control valve tool, to be used as OEM T10352/1
- camshaft control valve tool, to be used as OEM T10352/2
- belt tensioner locking pin, to be used as OEM T10060A
- tensioner locking pins (2x), to be used as OEM T40011
- oil pump tensioner locking tool, to be used as OEM T40265



Item #
8928

## Engine Timing Tool Set | for VAG 2.0 TFSI

- for checking and setting the engine timing on VAG 2.0L TFSI engines with code CAEB as of 2009

- crankshaft counterholding tool, to be used as OEM T10355
- crankshaft thrust piece, to be used as OEM T10368
- camshaft locking bolts (4x), to be used as OEM T40196
- chain tensioner locking clips (2x), to be used as OEM T40267
- chain sprocket locking tools (2x), to be used as OEM T40271
- camshaft control valve tool, to be used as OEM T10352



Item #
8951

## Camshaft Central Valve Sockets | for VAG 1.8 / 2.0 TFSI / TSI

- for disassembly / assembly of 4/3-way central valve of camshaft adjustment
- suitable for 1.8 & 2.0 L 4-cyl. injection & direct injection engines with timing chain, installed in the following models:
  - Audi A3, A4, A5, Q5, TT
  - Seat Altea, Leon, Toledo, Exeo
  - Skoda Octavia II, Superb II, Yeti
  - Volkswagen Eos, Golf, Jetta, Passat, Scirocco, Sharan, Tiguan
- 3 special sockets, 10 mm (3/8") drive:
  - special socket for camshaft control valve, to be used as OEM T10352
  - special socket for camshaft control valve, to be used as OEM T10352/1
  - special socket for camshaft control valve, to be used as OEM T10352/2



Item #
9064

## Camshaft Central Valve Sockets | VAG 1.8 / 2.0 TFSI

- used for removal and installation of 4/3-way central valve on the camshaft adjustment
- suitable for VW Passat, Audi A3, A4, A5, Q5 1.8 l and 2.0 litre engines with chain drive
- to be used as OEM T10352 / T10352/1

Item #
8565



## Engine Timing Tool Set | for VAG FSI, TSI 1.4, 1.6 with Timing Chain

- to check and the adjust the camshaft timing
- required when replacing timing chains
- suitable for VAG FSI and TFSI 1.4L and 1.6L engines

### suitable for the following models:

- Audi A3 (03-10)
- Seat Ibiza, Leon, Altea
- Skoda Octavia (04-09), Fabia (07-09), Superb (09-10), Roomster (06-09)
- VW Golf (03-09), Golf Plus (05-09), Jetta (06-09), Passat (05-09), Polo (02-08), Scirocco (09-10), Tiguan (07-09), Touran (03-09), Eos (06-09)
- engine code AXU, BLG, BAG, BMY, BKG, BMK, BLF, CAVA, BLN, CAVB, BLP, CAVC, CAVE, CAVF, CAVD, CAXA, CAXC, CDGA, BTS

- camshaft locking tool, to be used as OEM T10171
- setting gauge holder, to be used as OEM T10100
- crankshaft locking tool, to be used as OEM T10340
- tensioner locking tool, to be used as OEM T40011




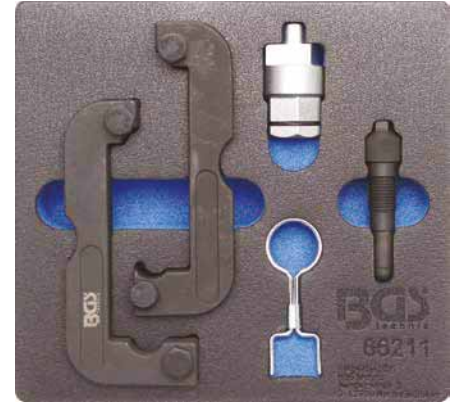
Item #	Description
62625	Engine Timing Tool Set   for VAG FSI, TSI 1.4, 1.6 with Timing Chain
62625-1	Crankshaft Locking Tool   for VAG FSI / TFSI   for BGS 62625

## Engine Timing Tool Set | for Audi 2.4, 2.8, 3.0 TFSI

- for setting the engine timing when replacing the cylinder head gasket, camshaft, etc.
- suitable for e. g. Audi A6, Q5


- 2 camshaft locking tools, to be used as OEM T40133
- crankshaft locking pin to be used as OEM T40069
- chain tensioner locking tool, to be used as OEM T40071
- crankshaft turning tool, to be used as OEM T40058

Item #		
66211		<b>1/6</b>



## Front Mask Removing Tool | for Audi A4 | 2 pcs.


- for moving the front mask in service position e. g. Audi A4, Passat as of 1997
- for changing the toothed belt or replacing the water pump
- to be used as OEM T10093

Item #	
8023	



## Camshaft Guide | for VW, Audi | 170 mm

- for VW and Audi
- engine codes: AAA - ABV - AES - AGZ - AMY - AZX

Item #	
8122	



## Tensioner Pulley Wrench | for VW/Audi engines

- 5-way adjustable and 180° pivotable handle
- can also be used in hard-to-reach areas
- especially for timing belts on 4- and 5-cylinder VAG engines and VW T4 servo pumps
- extra flat type

Item #	
8150	



## Camshaft Locking Tool | for Audi, VW

- is needed for changing of the tooth belt on Audi and VW with the following engines: AUDI A4 2.4 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 or Volkswagen with ACK, ALG, APR, AQD engines and Passat 2.4 1996 - 2002, Passat 2.8 30v 1996 - 2001
- avoids distortion of the camshaft during tooth belt assembly
- allows easy and precise assembly of the tooth belt
- suitable crankshaft locking tool available under BGS 8155-6



Item #
8232

## Camshaft Locking Tool | for Audi, VW

- is needed for changing of the tooth belt on Audi and VW with 2-valve V6 engines e.g. Audi 80, 90, A4, A6 1994-97 ABC, AFC engine
- avoids distortion of the camshaft during tooth belt assembly
- with the fixing hook a tight fit is guaranteed
- allows easy and precise assembly of the tooth belt



Item #
8233

## Camshaft Locking Tool | for Audi, VW

- is needed for changing of the tooth belt on Audi and VW with the following engines: V8 3.3L to 4.2L 5-valve engines in Audi A6, A8 with e.g. engine codes AKB, AUX, AYS, AQJ, ARS, ART, AWN, BBD, BCY, BFM 1998 - 2003 and VW Touareg and Phaeton
- avoids distortion of the camshaft during tooth belt assembly
- allows easy and precise assembly of the tooth belt
- to be used as OEM T40005



Item #
8234

## Serpentine Belt Tool | for VAG

- for VAG engines without tensioner pulley
- tensioning is carried out through spring loaded alternator
- wrench allows to press the alternator against the spring tension and change the poly-V-belt without problems
- knurled bolts prevent slipping-off hazard



Item #
8239



## Special Crankshaft Rotation Tool | for VAG 5-Cylinder Engines

- no twisting of camshafts- necessary for crankshaft adjustment and use as a lever
- suitable for all 5-cylinder VW diesel engines
- used in e. g. Touareg as of 2003 and Transporter as of 2004
- fixing screw allows easy mounting on crankshaft
- to be used as VAG OEM T10225

Item #
8249



## Crankshaft Seal Ring Mounting Tool | for VAG 1.4 & 1.6 16V

- for mounting of the transmission-side radial sealing ring
- installing the sealing ring without this tool can cause leaks, destruction of the new sealing ring and bad engine running
- suitable for VAG vehicles with 1.4 & 1.6 16V engines, installed in e. g. Seat Arosa, Ibiza, Cordoba, Leon, Toledo, Inca, Skoda Fabia, Octavia, Roomster, VW Lupo, Polo, Golf, Bora, Beetle, Caddy
- to be used as OEM T10017

Item #
8334



## Crankshaft Seal Ring Mounting Tool | for VAG Petrol & Diesel Engines

- for mounting of the transmission-side radial sealing ring
- an assembly test of the sealing ring without this tool can cause leaks, destruction of the new sealing ring and poor engine running
- suitable for VAG vehicles  
VW Golf, Touran and Audi A3, A4  
1.4i Turbo, 1.4 & 1.6 petrol direct injection,  
1.9 / 2.0 SDI, 2.0 Common Rail Diesel engine
- to be used as OEM T10134

Item #
8335



## Engine Timing Tool Set | for Audi, VW V6 TDI

- for locking of crankshaft and camshaft when working on the engine timing, e. g. changing of the tooth belt, disassembly of the cylinder heads etc.

### suitable for the following models

- VW Passat 2.5 V6 TDI
- Audi A4 2.5 V6 TDI
- Audi A6 2.5 V6 TDI
- Audi A8 2.5 V6 TDI
- Skoda Superb 2.5 V6 TDI
- engines codes: AFB, AKN, AKE, AYM, BAU, BCZ, BDG, BDH, BFC
- crankshaft locking pin, to be used as OEM 3242
- camshaft locking plates, to be used as OEM 3458
- crankshaft locking pin also individually available as BGS 8155-6



Item #
8275



## Camshaft Locking Tool | for VAG | adjustable | 12V / 30V

- wide application range because of adjustable camshaft locking tool, to be used as OEM 3391 or OEM 3243
- crankshaft locking bolt to be used as OEM 3242
- is needed for changing the tooth belt on Audi and VW with following engines:
  - AUDI A4 2.4 2.8 1997 - 2002
  - AUDI A6 2.4 1997 - 2002, A6 2.8 1997 - 2002
  - AUDI A8 2.8 1997 - 2002, S4 2.7 Turbo 1997 - 2001
  - Volkswagen with ACK, ALG, APR, AQD engines
  - VW Passat 2.4 1996 - 2002, Passat 2.8 30v 1996 - 2001
  - 2 valves V6 engines e.g. Audi 80, 90, A4, A6 1994 - 1997 ABC, AFC engine
- avoids distortion of the camshaft during tooth belt assembly
- allows easy and precise assembly of the tooth belt



Item #
8522

## Camshaft Setting Tool | for Audi V8 4.2

- for adjusting the camshafts
- to be used as OEM T40047
- ensures correct setting of the hall sensor wheel, an incorrect setting may cause bad idle and lazy response lead
- suitable for cars with 4.2 liter V8 engines: AUDI A6 (2005 - 2006), A8 (2004 - 2006), Quattro (2003 - 2005), S4 (2004 - 2009), VW Phaeton (2004 - 2006) with engine codes: BNK - BFM - BGK - BAS - BHF - BGH



Item #
8531

## Camshaft Locking Tool | for Audi 8-Cylinder Engines

- suitable for Audi A4 2001> and A6 1998> with 8-cylinder engines
- for checking and adjusting the engine timing
- to be used as OEM T40046

Item #
8532



## Crankshaft Rotating Tool | for VAG

- facilitates turning the crankshaft for e.g. checking the engine timing
- suitable for Audi A6 2005>, Audi A8 2003> with 6- and 8-cyl. engines 2.4 L, 3.2 L FSI, 6 - and 8-cyl. TDI common rail
- to be used as OEM T40058

Item #
8555



## Crankshaft Locking Tool | for VAG 5- and 10- cylinder

- suitable for VW T5 as of 2004, Touareg and Phaeton as of 2003 with 5-cylinder and 10-cylinder engines
- camshaft locking tool for review and adjustment, suitable for 5- and 10-cylinder engines
- to be used as OEM T10199 / OEM T10199/1

Item #
8690



## Flywheel Locking Tool | for VAG 1.9 TDI

- for locking the flywheel
- to be inserted into the bore of the transmission housing
- fits on VW, Skoda, Seat with 1.9l diesel engines
- e. g. for motor recognition 1Z, AFN, AHU, ALE, AVG

Item #
8751



## Crankshaft Mounting Tool | for VAG 6- and 8-cylinder TDI

- for fitting the camshaft in the cylinder head
- suitable for the following VAG models: VW Tiguan 2008 / Passat CC 2009 / Touareg 2003 / Phaeton 2003, Audi A3 2004 / A4 2001 / A4 2008 / A5 2008 / Q5 2008 / A6 2005 / Q7 2007 / A8 2003
- 6-cylinder TDI common rail 2.7 & 3.0 4-valve engines
- 8-cylinder TDI common rail 4.0 4-valve engines
- to be used as VAG OEM T40095

Item #
8871



## Timing Chain Adjusting Wrench | for VAG

- used for tensioning the timing chain
- suitable for Audi A6 from 2005 4.2 l direct injection 8-cyl., 4 valve
- to be used as OEM T40079



Item #
8878

## Camshaft Locking Tool | for VAG W8 and W12

- for aligning the camshafts
- suitable for V6 3.2L FSI R32 W8 and 6.0L W12
- 2 alignment rulers
- to be used as OEM T10068 & T10068A



Item #
8883

## Camshaft Sprocket Locking Tool | for VW 1.8 / 2.0 TFSI

- for locking the inlet and exhaust camshafts when loosening the central screws



Item #
8940

## Camshaft Spacers | for VAG

- used for locking the sliding pieces on the camshaft
- suitable for 4-cyl. petrol direct injection, 2.0 turbo, 4 valve engines e. g. Audi A4 2008>, Audi Q5 2009>
- to be used as OEM T40191



Item #
8946



## Camshaft Sprocket Locking Tool | for VAG 1.0

- for locking the camshafts in the adjustment position
- is needed when checking and adjusting and adjusting the engine timing
- can be used for following car types: Seat Mii 1.0 (3-cylinder), Skoda Citigo 1.0 (3-cylinder), Volkswagen Up 1.0 (3-cylinder)
- motorcodes CHYA, CHYB, CPGA
- to be used as OEM T10476

Item #
8977



## Guide Bolt Set | for VW T5 Front Mask

- are used instead of the front panel mounting bolts
- allows the panel to be slid away from the engine without disconnecting all fluid pipes etc.
- required for e. g. works on the camshaft drive
- suitable for Volkswagen T5 (as of 2004)
- includes 4 bolts M8 x 1.25, Ø 13 mm, length 200 mm
- to be used as OEM T10228

Item #
9204



## Camshaft Adaptor Socket | for VAG 1.8 / 2.0 TFSI

- for rotating and holding the camshaft adjuster when working on the timing chain
- suitable for 1.8 / 2.0 TFSI (3rd generation) built in the following models, e. g.:
  - Audi A3 (as of 2012), A4 (as of 2008), A5 (as of 2009)
  - A5 Coupe (as of 2008), Q5 (as of 2008)
  - Seat Alhambra (as of 2008), Exeo (as of 2009), Altea (as of 2009)
- to be used as OEM T40266

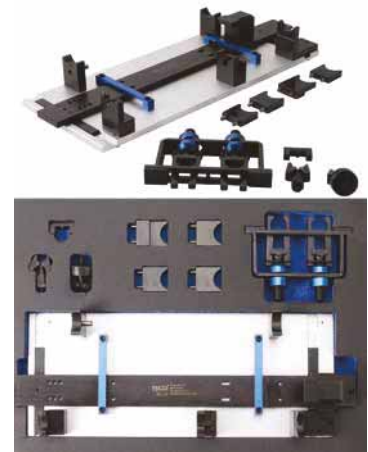
Item #
9209





## Camshaft Mounting Tool Set | for VAG and Porsche

- for installation camshafts in the correct position
- required when installing new or existing camshafts, an installation without this tool can cause damage to the camshaft bearing bridge and cylinder head
- suitable for the following diesel vehicles (TDI CR) as of 2003 Audi, Porsche, Seat, Skoda, Volkswagen with 1.2 1.6 2.0 2.7 3.0 4.0 4.2 Common-Rail engines
- engine codes: ASB, ASE, BKN, BKS, BMK, BNG, BPP, BSG, BTR, BUG, BUN, BVN, CAAA, CAAB, CAAC, CAAD, CAAE, CAGA, CAGB, CAGC, CAHA, CAHB, CAMA, CAMB, CANA, CANB, CANC, CAND, CAPA, CARA, CASA, CASB, CASC, CASD, CATA, CAYA, CAYB, CAYC, CAYD, CAYE, CBAA, CBAB, CBAC, CBBA, CBBB, CBDA, CBDB, CBDC, CCFA, CCFC, CCHA, CCHB, CCLA, CCMA, CCWA, CCWB, CDBA, CDCA, CDSB, CDTA, CDTB, CDUC, CDUD, CDYA, CDYB, CDYC, CEGA, CEXA, CFCA, CFFA, CFFB, CFFD, CFFE, CFGB, CFGC, CFGD, CFHA, CFHB, CFHC, CFHD, CFHE, CFHF, CFJA, CFWA, CGKA, CGKB, CGLA, CGLB, CGLC, CGLD, CGLE, CGQB, CJAA, CJCA, CJCB, CJCC, CJCD, CJGA, CJGC, CJGD, CJMA, CKDA, CKTB, CKTC, CKUB, CKUC, CKVB, CKVC, CLAA, CLAB, CLCA, CLCB, CLJA, CLLA, CLNA, CLZB, CMEA, CMFA, CMFB, CMGB, CMHA, CNEA, CNFA, CNRB, CRCA, CSHA, M05/9D (CAS), M05/9E, M05/9E (CRCA), M05/9E (CRCB)
- mounting device including pre-assembled parts, to be used as OEM T40094
- camshaft retaining clamp, to be used as OEM T40095
- 2 alignment clamps, to be used as OEM T40096 & T40096/1
- 4 camshaft brackets for mounting device, to be used as OEM T40094/1, T40094/2, T40094/9, T40094/10
- locking tool for camshaft holder, to be used as OEM T40094/11



Item #
9319

## Engine Timing Tool Kit | for VAG | 3 pcs.

- suitable for VAG 2.0 liter TDI and some 1.9L TDI with oval crankshaft wheel
- crankshaft locking tool, to be used as OEM T10100
- locking bolt for pump, to be used as OEM 3359
- locking plate for idler, to be used as OEM T10008



Item #
62640



## Engine Timing Tool Set | for VAG | 3 pcs.

- suitable for VAG 1.2 - 1.4 - 1.9l TDI engines with round crankshaft wheel
- crankshaft locking tool, to be used as OEM T10050
- locking bolt for pump, to be used as OEM 3359
- locking plate for idler, to be used as OEM T10008



Item #
62641



## Crankshaft Timing Belt Pulley Locking Tool | for VAG

- suitable for VAG 2.0L TDI and some 1.9L TDI with oval crankshaft wheel
- to be used as OEM T10100

Item #
62642



## Crankshaft Timing Belt Pulley Locking Tool | for VAG

- suitable for VAG 1.2 - 1.4 - 1.9l TDI engines with round crankshaft wheel
- to be used as OEM T10050

Item #
62643



## Holding Wrench | for Crankshaft Belt Pulley | for VW, Seat 1.6 l

**suitable for the following models:**

- VW Lupo, Polo, New Beetle, Golf, Bora Caddy
- Seat Ibiza, Cordoba
- engine codes: ARC, AVY

- length: 770 mm

Item #
66701



## Belt Pulley Counterholding Wrench

- suitable for VW 1.4 / 1.6 / 2.0 l engines (engine codes ADX, AEA, AEE, AEH, AEX, AFH, AFK, AGP,AGR, AHW, AJM, AKL, ALN, AMF, ANA, ANY, APE, APF,ARM, ATJ, AUA, AWH)
- for counterholding the belt pulley of 4-valve engines with pin diameter 11.5 mm
- also for counterholding the belt pulley of 2-valve engines

**suitable for the following models:**

- VW: Beetle, Bora, Caddy, Golf, Lupo, Polo, Sharan, Touran, Transporter
- Audi: A2 / A3 / A4 / A6, TT
- Skoda: Fabia, Octavia, Superb

Item #
66703



## Tensioner Pulley Wrench | 12-point | Ø 32 mm

- for moving the automatic tensioner pulley when replacing the tooth belt

### suitable for the following models:

- Audi 100 manufactured starting from 1991, A4, A6 2.5 TDI 5 cylinder
- VW Polo Diesel, Lupo as of 1999, LT and T4 2.5 TDI
- comparable engines of other manufacturers (Volvo etc.)



Item #
66720



## Tooth Belt Tensioner Pulley Wrench

- extra flat type
- 185 mm x 200 mm x 20,5 mm

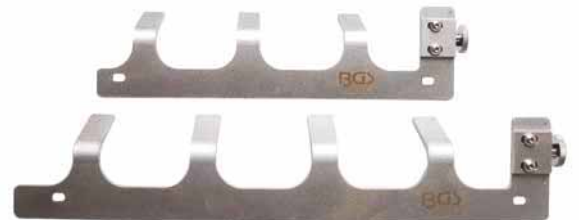


Item #
66725



## Setting Gauges | for VAG Pump-Nozzle Unit on 3- and 4-Cylinder Engines

- for adjusting the pump-nozzle units
- suitable for 3- and 4-cylinder engines and for pump-nozzle units with old and new solenoid valve nut



Item #
68341

## High Pressure Pump Sprocket Extractor | for VAG 2.0 TDi CR

- for removing the high pressure pump pulley on 1.6 / 2.0l and 6-cyl. TDI common rail engines
- can be used as OEM T40064



Item #
9206

## Driving Toothed Wheel Locking Tool | for VAG 3.6l FSi

- for locking the drive sprocket of high the pressure pump
- is required when adjusting the valve timing
- suitable for VAG 3.6l 6-cylinder 4-valve engines, built in VW Passat (357) (3C2) (3C5) starting from 2006, VW Touareg (7L6) (7LA) starting from 2006, Audi Q7 (4LB) starting from 2007
- engine codes: BLV, BHL, BHK
- to be used as OEM T10332

Item #
9418



## Driving Toothed Wheel Locking Tool | for VAG 3.6l FSi

- for locking the drive sprocket of the high pressure pump
- is required when adjusting the valve timing
- suitable for VAG 3.6L FSi 6-cylinder 4-valve engines installed in VW Passat (357) (3C2) (3C5) as of 2006, VW Touareg (7L6) (7LA) as of 2006, Audi Q7 (4LB) as of 2007
- engine codes: BLV, BHL, BHK
- to be used as OEM T10363

Item #
9492



## Camshaft Timing Tool Set | for VAG | 3 pcs.

- to secure the camshaft during inspection and adjusting the valve control times
- suitable for 1.2 / 1.4 TSi / TFSi engines with active cylinder management ACT or COD
- engine codes: CPTA, CZE A
- e. g. installed in the following models:  
Audi A1 (2013-), A3 (2013-), Q3 (2014-)  
VW Passat (2012), Golf (2012-), Polo (2015-)  
Seat Leon (2014-), Ibiza (2013-)  
Skoda Superb (2015-)
- camshaft adjusting tool, to be used as OEM T10504
- camshaft adjusting pin, to be used as OEM T10504/1
- camshaft inspection pin, to be used as OEM T10504/2

Item #
9493



## Crankshaft Locking Tool | for VAG 10 cylinder engines

- crankshaft locking tool with aligning pin
- to be used as OEM T10226
- suitable for e. g. VW Tourag, Phaeton

Item #
8622



## Engine Timing Tool Set | for Volvo T6

- for adjusting and checking the engine timing
- suitable for Volvo S80, XC90, XC60, XC70 3.0T, 3.2 with T6 engine as of 2007
- crankshaft rotating tool, to be used as OEM 9997257, 303-1219
- camshaft alignment tool, to be used as OEM 9997261 303 -1223
- tool for assembling and disassembling the end cover, to be used as OEM 9997263, 303-1225
- tool for assembling and disassembling the end cover, to be used as OEM 9997264, 303-1226
- T-star socket, T60, 12.5 mm (1/2") drive, to be used as OEM 9997272
- mounting bracket, to be used as OEM 9997271
- end cover adjusting tool, to be used as OEM 9997266
- end cover adjusting tool, to be used as OEM 9997267



Item #
8527

## Engine Timing Tool Set | for Volvo 4-, 5-, 6-Cyl. Engines up to YOM 06

- for alignment of the cam- and crankshafts
- also for correct installation of the camshafts over the cam cover
- suitable for 4-, 5- and 6-cyl. twin cam engines (not 3.2l) up to 2006 on Volvo models: 700, 800, 850, 900, 960, C70, S40, S60, S70, S80, S90, V70 -2000, V70XC, XC70, V90, XC90
- 2-piece camshaft cover tool, to be used as OEM 9995454
- crankshaft locking tool, to be used as OEM 9995452
- camshaft alignment tool, to be used as OEM 9995451
- holder, to be used as OEM 9995453
- 2x 110 mm and 2x 85 mm screws



Item #
8562

## Engine Timing Tool Set | for Volvo B4204

- for adjusting and checking the engine timing
- required for e.g. working on valve drive and renewing the cylinder head gasket
- suitable for Volvo B4204 engine (8-speed gearbox)
- belt pulley counterholding tool, to be used as OEM 9997495
- crankshaft wheel puller, to be used as OEM 9997493
- radial seal ring mounting tool, to be used as OEM 9997496
- camshaft sprocket tool, to be used as OEM 9997497
- camshaft alignment tool, to be used as OEM 9997490



Item #
8998





## Double Hook with Joint for Removal of Shaft Gaskets

- 320 mm long lever arm for fast and easy disassembly of radial sealing rings
- lever adjustable in 5 positions of up to 45°
- hardened pulling lever for long product life time
- anti-slip coated handle

Item #
118



## Reaction Wrench, for offset-Type Pulley | 300 mm

- wrench for safe blocking of deep-drawn water pump belt pulleys through mounting screws
- can be used for many VW + Audi engines with A/C
- can also be used for loosening stuck nuts of the water pump belt pulley
- length: 300 mm

Item #
1747



## Camshaft Disc Puller | for VAG

### suitable for:

- VW Passat, Phaeton, Touareg
- Skoda Superb
- Audi A4, A6, A6 Quattro, A8, Allroad, Cabrio, RS4, RS6, S6, S8
- engines / engine codes:
  - 3.0 L V6 30V: ASN, AVK, BBJ
  - 3.7 L V8 AKC, AQG
  - 4.2 V8 ANK, AQF, AQH, AQJ, ARS, ARU, ASG, AWN, AWU, AVN, AVP, AXQ, BCY, BGH, BGJ, BHX
  - 2.5 L TDI V6 Diesel AFB, AKE, AKN, AYM, BAU, BCZ, BDG, BDH, BFC

Item #
1767



## Fan Hub Wrench Set

- for holding the visco-clutch drive shaft in BMW and Ford
- allows the technician to hold the water pump pulley in place while loosening the radiator fan
- allows removal of the visco-coupling on the cooling fan

Item #
1763



## Fan Hub Wrench Set | 4 pcs.

- 32 mm x 270 mm for holding the Visco-clutch drive shaft in BMW and Ford
- 36 mm x 270 mm for holding the Visco-clutch drive shaft in Ford, Opel and GM
- 41 mm x 270 mm for moving the waterpump in Opel and GM in order to span the drive belt in OHC engines
- 46 mm x 270 mm for moving the waterpump in Opel and GM in order to span the drive belt in OHC engines



Item #	Description
1684	Fan Hub Wrench Set   4 pcs.
1772	Fan Hub Wrench   for BMW, Ford   32 mm
1774	Fan Hub Wrench   for Ford, Opel, GM   36 mm
1682	Fan Hub Wrench   for GM, Opel   41 mm
1683	Fan Hub Wrench   for Opel, GM   46 mm



## Flywheel Locking Tool | for Citroën, Fiat, Peugeot

- for Citroën, Fiat, Peugeot
- also suitable for identical engines in BMW, Renault, Mercedes-Benz
- flywheel locking tool, to be used as OEM BMW 119260, Renault MOT 582-01, PSA 0153A, 6012T, 9765.54, Fiat 1860161000, 1867030000, Mercedes-Benz 607589014000

Item #
1771



## Crankshaft / Equaliser Flange Puller

- ideally suited for disassembly and assembly of balancer shafts and crank shaft flanges
- all-purpose, incl. 9 adaptors
- 1 puller plate, 20 mm holder
- 12 screws, 3 pcs. each: 3/8"NC16 x 57 mm - 3/8"NC24 x 57 mm - M6 x 1.0 x 60 mm - M8 x 1.25 x 60 mm
- 1 centre bolt 10 mm
- 9 adaptors:
  - M12 x 1.5 - 3/8"NC16
  - M14 x 1.5 - 3/8"NC16
  - M16 x 2.0 - 3/8"NC16
  - 1/2" x NC20 - 3/8"NC16
  - 9/16" x NC18 - 3/8"NC16
  - 7/16" x NC20 - 3/8"NC16
  - 3/4" x NC16 - 3/8"NC16
  - 5/8" x NC18 - 3/8"NC16
  - 3/8" x NC16 - 3/8"NC16
- material: carbon steel
- surface finish: burnished

Item #
7711



## Water Pump Disassembly Tool | for VW

- suitable for VW T5, Touareg 2.5D
- gear wheel puller, for disassembling of waterpump gear wheel, to be used as OEM T10222A
- waterpump puller, for disassembling of waterpumps, to be used as OEM T10221A
- special key, for counterholding the crankshaft when loosening the waterpump's gear wheel screw, to be used as OEM T10225

Item #
8221



## Radial Seal Dismantling and Assembly Set

- facilitates a damage-free mounting of radial sealing rings
- universally usable for radial sealing rings with Ø 21.5 - 64 mm
- suitable for all pressed radial sealing rings such as on camshafts, crankshafts, balancer shafts, ect.
- 4 spacers to compensate the differences in length of central screw
- 7 press sleeves for mounting of radial sealing rings
- 7 adaptor rings for normal central bolts (M8 - M20)
- 2-claw pullers for pulling tightly fitted radial sealing rings, 35 mm puller range



Item #	Description
8224	Radial Seal Dismantling and Assembly Set
8224-1	Replacement Puller Legs   70 mm   for BGS 8224
8224-2	Replacement Puller Legs   114 mm   for BGS 8224

## Separating Pliers for BMW Oil Coolers

- simplifies the assembly and disassembly of oil coolers
- screwed support bracket, 180° rotatable
- Holding forks, 15 and 22 mm
- distance adjustable (like water pump pliers)



Item #
8289

## Flywheel Holding Lever

- facilitates the disassembly and assembly of clutch cover and flywheel
- hardened gear segment for locking starter gear rings

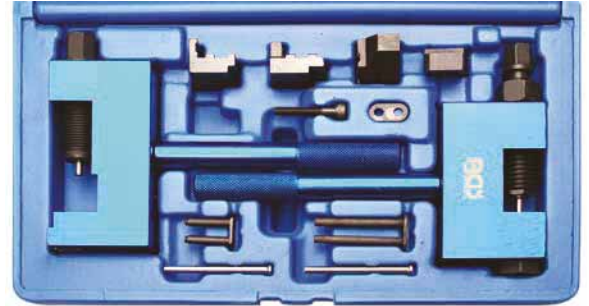


Item #
8348



## Timing Chain Riveting Tool


- for renewing and riveting timing chains
- old timing chain is fed in with help of the new chain, a dismantling of the timing chain case is often not required
- suitable for Mercedes-Benz models with simplex and duplex timing chain with 4 mm chain bolt
- to be used as Mercedes-Benz OEM tools 112589096300, 602589003900, 602589023300, 602589024000, 602589056300, 602589056301

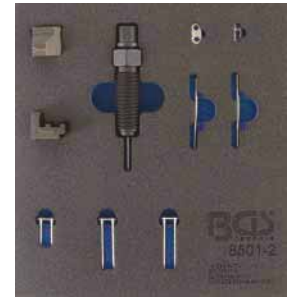


Item #	Description
8501	Timing Chain Riveting Tool
8501-1	Adaptor for BGS 8501

## Supplementary Set for Timing Chain Riveting Device (BGS 8501) | suitable for 3 mm Chain Pins

- suitable for 3 mm Mercedes-Benz simplex and duplex timing chains in gasoline and diesel engines new generation
- to be used as OEM 103589016300, 602589024000 and 602589046300

Item #	
8501-2	 <b>1/6</b>



## Belt Pulley Puller | Universal

- allows easy removal of the crankshaft pulley, provides a counterholding function to prevent rotation of the crankshaft
- counter holder with 12.5 mm (1/2") drive
- variable mounting distance 54 - 120 mm
- includes fastening screws M8 and M10


Item #
8551



## Counteracting Spanner for Camshaft Sprockets | Universal

- for counterholding the camshaft sprocket while loosening and tightening the camshaft bolt
- enables a rotation of the camshaft
- adjustable and lockable opening width from 100 - 150 mm



Item #	
8674	



## Timing Pulley Counterholder

- for loosening and fastening the camshaft wheel bolts
- suitable for all common camshaft sprockets
- adjustable from diameter 45 - 150 mm

Item #
8854



## Adjustable Bearing Ring & Radial Seal Ring Driver

- for installing bearing races and radial seal rings
- adjustable to the suitable diameter
- diameter range: 18 - 86 mm
- lightweight alloy material prevents damage to bearing housing

Item #
9174



## Radial Seal Ring Mounting Tool

- for mounting of shaft seal rings
- flexible rubber spider holds the radial seal ring during centering / mounting
- universally applicable for seal rings with inside diameter from 32 mm to 60 mm
- screw, washer, spider holder, handle, small and large rubber spider, 63 mm and 76 mm driver plate

Item #
9003



## Crankshaft Pulley Tool Set | for Jaguar, Land Rover

- for dismantling and mounting of crankshaft pulleys
- required when working on e. g. camshaft drive
- crankshaft pulley holding tool to be used as OEM 303-893
- bridge piece
- pressure plate
- guide pin
- force screw
- and 2 securing bolts, to be used as 303-588

Item #
9007





## Crankshaft Pulley Tool | for BMW N47

- allows easy and gentle dismantling of the pulley bolts
- suitable for BMW N47 engines



Item #	
9015	 <b>1/3</b>

## Balance Shaft Puller | for Audi, VW

- allows easy removing of the balancer shaft
- suitable for following models and engines with 4 cylinders 1.8, 2.0 L injection engines with timing chain:
  - VW Golf (since 04), Passat (since 06), Passat CC (since 09), Tiguan (since 08), Eos (since 06)
  - Audi A3 (since 04), A4 (since 08), A5 (since 08), TT (since 07)
- to be used as OEM T10394
- internal thread: M8 x 1.25 mm for sliding hammer
- ideal as a complement to BGS 68345



Item #
9065

## Pulley Counterholder for BMW

- allows easy loosening and tightening of torsional pulleys on BMW engines

suitable for the following models:

- E81 120D (163 PS), E46 318D (115 and 116 PS), 318TD (115 PS), E46 320D (136 and 150 PS), 320TD (150 PS), E90 318D (150 PS), 320D (150 and 163 PS), E91 318D (122 PS), 320D (150 and 163 PS), E39 520D (136 PS), E60 520D (150 and 163 PS), E61 520D (150 and 163 PS), E83 X3 2.0D (150 PS)

suitable for crankshaft pulleys with BMW part numbers:

- 11 23 7 787 304, 11 23 7 790 921, 11 23 7 793 882, 11 23 7 801 977, 11 23 7 805 696

- to be used as OEM 116310



Item #
9066

## Crankshaft Seal Ring Mounting Tool | for VAG 1.2 L FSI

- allows damage-free installation of PTFE crankshaft seal ring in timing case
- suitable for Golf / Golf Plus as of 2009 & Polo as of 2010
- includes seal ring stretching sleeve & pushing sleeve
- to be used as OEM T10417/1 & T10417

Item #
9091



## Ignition Coil Puller for VAG

- for removing ignition coils on VAG models as of 2013
- pencil type for inserting in mounting hole of the ignition coil
- suitable for 4 cylinder 1.2 / 1.4 / 1.8 / 2.0 FSI / TFSI engines, built in e. g. VW Golf, Audi A3, Seat Leon, Skoda Octavia
- to be used as OEM T10530

Item #
9094



## Crankshaft Seal Ring Installation Tool | for VAG 2.0 TFSI

- for installing the crankshaft front seal ring
- suitable for 4 cylinder 2.0 TFSI petrol engines, built in e. g. Audi A3

Item #
9202



## Balancer Shaft Locking Tool | for BMW

- for locking / adjusting the balancer shaft
- L-shape with 9 mm slot
- to be used as OEM 118700

Item #
9222



## Crankshaft Vibration Dampener Alignment Tool | for Ford, Volvo

- for aligning of the crankshaft vibration dampener (crankshaft pulley)
- is required for e. g. 1.6 l EcoBoost engines
- to be used as OEM Ford 303-1550 or Volvo 9997431

Item #
9224



## Timing Chain Tensioner Lever | for VAG 1.8 / 2.0 TFSi

- used to push back the timing chain tensioner without removing the front engine cover
- required when renewing the timing chain
- to be used as OEM T40243

### suitable for the following TFSi engines / models (as of 2007):

- Audi A3, A3 Cabrio, TT, Q3
- Seat Alhambra, Altea Free Track, Exeo, Leon FR, Toledo
- Skoda Octavia II, Superb III (3T), Yeti
- Volkswagen Eos, Golf VII, Passat (B6), Passat CC, Passat Variant, Sharan, Beetle, Scirocco, Tiguan
- engine codes (1.8 l engines):
  - CDAA, CDHA, CDHB, CJEB, CDAB, CGYA
- engine codes (2.0 l engines):
  - CCZA, CDNB, CDNC, CFKA, CCZC, CPSA, CESA, CETA, CCZB, CDND, CCZD



Item #
9272

## Radial Seal Ring Extractor Tool Set for Crank- & Camshafts

- for assembly and disassembly of rotary shaft seals
- especially suitable for sealing rings, where a stub shaft protrudes and a disassembly is almost impossible without this tool
- holds the sealing ring on the inside with a conical profile
- suitable for most commercial sealing rings
- extractor for 35 - 44 mm sealing ring diameter, with 31.5 mm center bore
- extractor for 59 - 64 mm sealing ring diameter, with 54.5 mm center bore



Item #
8759

## Radial Seal Ring Extractor Tool Set for Crank- & Camshafts | for VAG | 7 pcs.

- for assembly and disassembly of rotary shaft seals
- especially suitable for sealing rings, where a stub shaft protrudes and a disassembly is almost impossible without this tool
- holds the sealing ring on the inside with a conical profile
- suitable for most commercial sealing rings
- suitable for most VAG petrol engines such as VW Lupo and Polo 1.4l, VR6, Audi V6, etc.
- includes the following pullers: 5 short pullers, Ø 25 - 32 - 35 - 27 - 55 mm
- 1 long puller, Ø 32 mm



Item #
9280

## Tool Tray 1/6: High Pressure Pump Sprocket Puller | for Hyundai & Kia

- to remove the high pressure pump sprocket when dismantling the high pressure pump on Common Rail Diesel vehicles from Hyundai and Kia
- suitable for the following models:  
KIA Carens (UN), Cee'd (ED) & (JD), Optima (TF), Rio (UB), Soul (AM), Sportage (SL) & (SLE), Venga (YN), Soul (PS), Hyundai Matrix, Getz, i30
- engine codes: 1.1D (TCI-U2), 1.4D (TCI-U2), 1.6D (TCI-U2), 1.7D (TCI-U2), 1.6 TCI (U2), 1.4 CRDi (U2), 1.6 CRDi (U2)
- contains: high pressure pump removal tool, to be used as OEM 093312A010, consisting of base plate, sprocket stopper, mounting screws

Item #	
9497	



## High Pressure Pump Sprocket Puller for Hyundai / Kia

- for pulling off the sprocket of the high pressure pump
- needed when replacing the high pressure pump

### suitable for the following models:

- Kia Sorento BL (as of 2003 - 2009), engine codes: D 2.5 VGT, D 2.5 WGT
- Hyundai iLoad (as of 2007), engine codes: D 2.5 TCi-A, D 2.5 TCi-A2
- to be used as OEM 09331-4A0000

Item #
9332



## Crankshaft Pulley Holding Tool | for Honda & Acura | 50 mm

12.5  1/2

- for holding the crankshaft pulley of the damper when loosening or fastening the crankshaft pulley bolt
- required e. g. while working on toothed belt drive
- suitable for most Honda and Acura engines as in Accord, Civic, CR-V, FR-V, Legend, Jazz, Odyssey, Prelude, S2000, Shuttle, Stream 2.0I motor, Code F20A4
- to be used as OEM 07MAB-PY3010A with a 12.5 (1/2) ratchet or sliding bar
- socket, 19 mm (BGS 10559) can be used as additionally required alternative tool for OEM 07JAA-001020A

Item #	
9464	



## Injector Pump Sprocket Puller / Timing Chain Tensioner Kit | for BMW, Opel

- puller for BMW injection pump sprocket
- is required for the disassembly of diesel injection pumps
- includes puller tools for the following applications:
  - for removing the sprocket from the pump shaft, suitable for 4-cyl. and 6 cyl. BMW engines M41, M51 and identical engines in Opel/Vauxhall Omega 2.5 TD (M51)
  - for removing the sprocket from the pump shaft and holding the pump wheel in the assembly position, suitable for BMW engines M47, M47TU, M57, M57TU
  - for tensioning the timing chain, suitable for BMW engines M50, M62, M62
- to be used as OEM 135120 - 135190 - 135191 - 135192 - 114230



Item #	Description
8750	Injector Pump Sprocket Puller / Timing Chain Tensioner Kit   for BMW, Opel
8750-1	Injection Pump Wheel Puller   for BMW, Opel

## Cylinder Head Stud Tool Set | 9 pcs.

- for easy removing and installing of studs in cylinder heads without damaging the thread
- also useable for other studs
- suitable for most popular stud sizes: M6 x 1.0 - M8 x 1.25 - M10 x 1.25 - M10 x 1.5

Item #
9185



## System Tray for Cylinder Head Repair

- needed when repairing cylinder heads, e. g. replacing the valves, hydraulic valve lifters, valve stem seals, etc.
- allows a safe and confusion free storing of components, such as camshafts, valves, valve springs, hydraulic tappets, shims, etc.
- length: 400 mm
- width: 450 mm
- height: 260 mm



Item #
8552

## Accelerator Adjustment Tool

- allows precise adjustment through spindle
- useful while the diagnosis of engine noise, checking the engine control, such as injector return flow test, checking the charging system, etc.
- clamping screw for mounting on the brake pedal



Item #
8957



## Engine Mounting Ring Spanner Set | for Mercedes-Benz | 2 pcs.

10 3/8

- ring spanner, 10 mm (3/8") drive, 12-point profile, 16 mm
- ring spanner, 10 mm (3/8") drive, 12-point profile, 17 mm
- suitable for engine mounting on Mercedes-Benz: W220, W210, W203, W221, W211, W204, W124, W140, W170, W126, W201, W202, W210
- length: 100 mm

Item #
9524



## Testing Tool for Turbo Charger Systems

- for checking the charging system components when installed
- professional and economic troubleshooting
- safety valve prevents applying excessive pressure
- suitable for turbochargers, G-chargers, compressors
- fits on most charging system hoses
- also suitable for leak detection
- includes 4 pairs of adaptors

suitable for the following hose sizes:

- 35 - 40 - 45 mm
- 50 - 55 - 60 mm
- 65 - 70 - 75 mm
- 80 - 85 - 90 mm



Item #	Description
8563	Testing Tool for Turbo Charger Systems
8563-1	Replacement Safety Valve for BGS 8563

## Testing Tool for Turbo Charger Systems | for Mercedes-Benz, Nissan, Renault, VW

- helps to locate leaks in the components of turbocharger systems such as pressure hoses, air-to-air intercooler, etc.
- testing must be performed when engine is switched off
- allows a professional and economical diagnosis
- includes: pressure regulator to ensures optimum test pressure and test adaptors with bayonet lock, Ø 31 - 38 - 46 - 51 - 56 - 61 mm
- use of additional leak detection sprays is possible for finding even the smallest leaks
- suitable for e. g. VW, Mercedes-Benz, Renault, Nissan



Item #
8777

## Testing Tool for Turbo Charger Systems with Manometers | 55 - 60 - 65 - 70 mm

- for checking the charging system components when installed
- professional and economic troubleshooting
- suitable for turbochargers, G-chargers, compressors
- includes following adaptors:
  - 2-step pressure adaptor for hose sizes 55 - 60 mm
  - 2-step sealing cap with pressure gauge for hose sizes 55 - 60 mm
  - 2-step pressure adaptor for hose sizes 65 - 70 mm
  - 2-step sealing cap with pressure gauge for hose sizes 65 - 70 mm



Item #
8958

## Special Spanner for Turbocharger, 12-point | for VW, Audi | 12 mm

- wrench for assembly and disassembly of turbo chargers
- facilitates assembly of hard-to-reach screws
- 10 mm (3/8") drive
- 12 mm, 12-point profile
- length: 99 mm
- depth: 85 mm

Item #
1004



## Vacuum-Pressure Adjuster Socket for VAG Turbochargers | 10 mm

6.3 1/4

- for the exchange of the vacuum-pressure adjusters in VAG engines with turbochargers with position sensor
- to be used as OEM T10422A
- wrench size: 10 mm
- length: 50 mm

Item #
9453



## Valve Spring Compressor Assembly Set | 13 pcs.

- for depressing the valve springs
- allows a changing of the valve stem seals without removing the cylinder head
- with pressure hose for filling compressed air into the cylinder
- suitable for M14 and M18 ignition plug threads
- including valve collet mounting tool
- max. width: 515 mm

Item #
1778



## Universal PRO Valve Spring Tensioner

- for tensioning of valve springs
- suitable for 1 to 12 cylinder engines with 2 and 4-valve technology
- also suitable for in-line and V engines from VW, Audi, Ford, Peugeot, Volvo, etc.
- mounting on different breakpoints is possible
- universally usable by a variety of settings

contains 7 pressure pieces with varying diameter sizes for e.g. following models:

- Ø 21 mm for Peugeot, Citroen HDI
- Ø 24 mm for VW, Audi, Seat, Smart and Opel
- Ø 25 mm for Hyundai
- Ø 28 mm for Toyota, Ford 16V
- Ø 32 mm for Opel, Peugeot
- Ø 35 mm for Renault, Peugeot
- Ø 42 mm for Ford



Item #
8357

## Air Valve Spring Compressor Set | 15 pcs.

10 3/8

- prevents the engine valve from falling into the body due to counterpressure, caused by air delivered via a spark plug-thread
- suitable for spark plug threads M14 x 1.25 and M18 x 1.5
- extensive accessories
- operates with 10 mm (3/8") drive T-handle or ratchet



Item #
1744

## Valve Spring Compressor | 35 - 200 mm

- for large petrol or diesel engines
- 2 valve spring pressure pieces:
  - outside Ø 25 mm for spring Ø 21 - 25 mm
  - outside Ø 30 mm for spring Ø 24 - 30 mm
- surface finish: chrome plated



Item #
1878

## Valve Spring Compressor | 72 - 130 mm

- surface finish: chrome plated

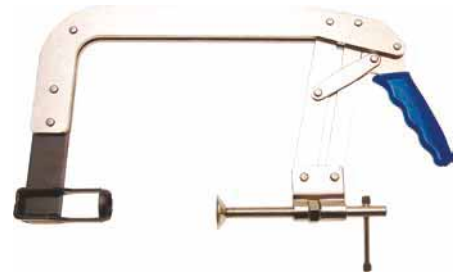
Item #
1877



## Valve Spring Compressor | for OHC engines | 72 - 240 mm

- for Toyota and others

Item #
1940



## Valve Spring Compressor "OverHead"

- for uncovered valves
- suitable for valve spring cap diameters 25 - 38 mm
- max. tensioning range: 39 mm

Item #
1762



## OHC Valve Spring Compressor

- with reversible legs and automatic valve shaft sealing
- not suitable for valve springs that are set deeply into the engine
- valve springs and valve shaft seals are replaced together with the cylinder head

Item #
1777



## Valve Spring Compressor | for OHV Valve Springs

- length: 320 mm

Item #
1781



## Special Valve Spring Compressor | 75 mm

- overhead type
- surface finish: nickel plated

Item #
1873



## Valve Spring Tensioning Tool for Peugeot, Citroen

- very useful when working on valves
- suitable for 1.0, 1.1, 1.4, 1.6 Petrol engines  
Peugeot 106, 205, 206, 306, 307, 405 and Citroen Xsara, Berlingo
- engine codes: T9M (CDY,CDZ), TU1M (HDZ,HDY), TU3M/Z (KDX,KDY, KDZ) TU3JP (KFW,KFX), TU3FJ2 (KFY,KFZ), TU5JP (NFZ)
- to be used as OEM 4533-TZ

Item #
8238



## Valve Shim Remover for DOHC Engines

- suitable for all DOHC engines e. g. in Volvo, Opel, Ford, Renault etc.
- sliding t-bar for easy handling

Item #
8252



## Valve Spring Compressor | for BMW N20, N26, N55

- for removing and installing the pressure spring on the intermediate lever
- to be used as BMW OEM 117110

Item #
62673





## Precision Feeler Gauges

- stainless steel blades
- with conical blades
- 100 mm long
- 0,05-1,0 mm
- metal handle

Item #	Description
3082	Precision Feeler Gauges   13 Blades
3083	Precision Feeler Gauges   20 Blades



## Special Feeler Gauge | 11 pcs.

- ideal for measuring the piston ring tolerance
- 0.03 - 0.04 - 0.05 - 0.06 - 0.07 - 0.10 - 0.15 - 0.25 - 0.30 - 0.40 - 0.50 mm

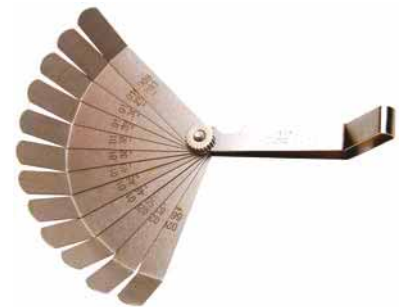
Item #
3135



## Precision Feeler Gauges, bent | 12 Blades

- stainless steel blades
- 0.08" - 0.10" - 0.12" - 0.13" - 0.14" - 0.15" - 0.16" - 0.18" - 0.19" - 0.20" - 0.25" - 0.26"
- 0.203 - 0.254 - 0.305 - 0.330 - 0.356 - 0.381 - 0.406 - 0.457 - 0.483 - 0.508 - 0.635 - 0.660 mm

Item #
3184



## Valve Wedge Removing Tool

- suitable for cars, scooters, lawnmowers with valve stem diameter up to 5.5 mm
- quick and easy disassembly of the valve wedges
- minimizes repair costs

Item #
8444



## Valve Stem Seal Pliers | 250 mm

- for multi-valve engines
- for easy removing of deep valve stem seals on multi valve engines
- e. g. for VW, Opel, Ford

Item #
1780



## Valve Stem Seal Pliers | 270 mm

- for easy removing of deep valve stem seals on multi valve engines
- extra long jaws, especially for multi-valve engines, e. g. Opel, VW and Ford
- hardened jaws

Item #
8668



## Valve Shims Pliers | 275 mm

- for removing valve adjusting shims
- suitable for OHC engines on Audi, Porsche, Ford, Fiat, VW, etc.

Item #
8830



## Sliding Hammer Extractor for Valve Stem Seal Ring

- suitable for PSA engines
- for fast, accurate and professional extraction of stuck valve stem seals without causing damage to the surrounding areas
- suitable for internal diameters of 6 to 9.5 mm
- sliding hammer thread M16 x 2.0

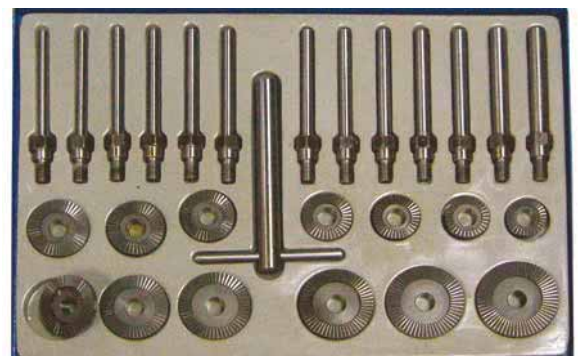
Item #
62610



## Valve Seat Cutter Set | 30 - 60 mm | 27 pcs.

- not suitable for hardened valve seats
- in metal case
- milling at 45° and 90°: 30 - 32.5 - 35 - 37.5 - 40 - 42.5 - 45 - 47.5 - 50 - 52.5 - 55 - 57.5 - 60 mm
- 13 stem guides: 6 - 6.5 - 7 - 7.5 - 8 - 8.5 - 9 - 9.5 - 10 - 10.5 - 11 - 11.5 - 12

Item #
1970



## Valve Seat Milling Cutter Set | 14 pcs.

- suitable for cylinder heads with hardened valve seats
- 6 double ended cutters:
  - Ø 28 - 35 mm, 45° and 75°
  - Ø 37 - 44 mm, 30° and 75°
  - Ø 37 - 46 mm, 45° and 68°
  - Ø 44 - 52 mm, 30° and 75°
  - Ø 46 - 60 mm, 30° and 45°
  - Ø 52 - 65 mm, 60° and 75°
- 4 continuously adjustable guides for Ø 6.5 to 12.5 mm
- T-handle for milling cutters

Item #
68346



## Valve Lapping Tool Attachment

- facilitates the insertion of valves
- automatic change in direction
- for use with fine grinding paste
- with 8 mm shank for holding in drill machine
- working speed min. 1000 rpm to max. 1250 rpm
- 4 different suction plates in 20, 30, 35 and 40 mm
- 13 mm shaft for attaching the suction cups

Item #	Description
1738	Valve Lapping Tool Attachment
1738-1	Rubber Adaptor for BGS 1738   Ø 17.3 mm
1738-2	Rubber Adaptor for BGS 1738   Ø 22 mm



## Suction Valve Grinder

- wooden handle, 2 rubber suction cups



Item #	Description
1740	Suction Valve Grinder   16 x 21 mm
1741	Suction Valve Grinder   28 x 34 mm



## Tensioner Pulley Wrench Set | 12-point 13 - 19 mm | 5 pcs.

- 45° offset heads allow you to reach all areas in the engine bay
- with slip guard handle for easy handling
- tensioner pulley wrenches 12-point 13 - 15 - 16 - 17 - 19 mm
- length: 460 mm



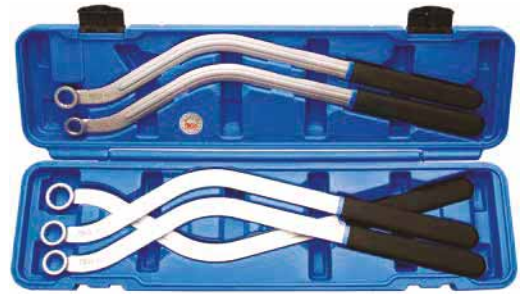
Item #	Description
1310	Tensioner Pulley Wrench Set   12-point 13 - 19 mm   5 pcs.
1310-14	Tensioner Pulley Wrench   12-point 14 mm



## Tensioner Pulley Wrench Set | 12-point, special Shape | 13 - 19 mm | 5 pcs.

- double angled for better reach of confined areas
- with slip guard handle for easy handling
- tensioner pulley wrenches 12-point 13 - 15 - 16 - 17 - 19 mm
- length: 460 mm
- surface finish: chrome plated

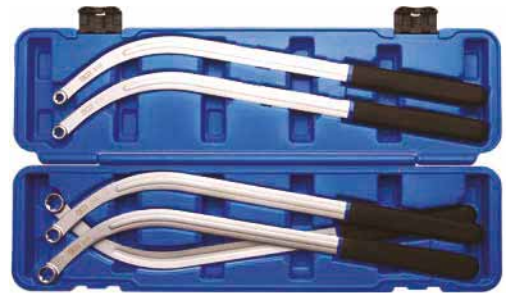
Item #
1314



## Tensioner Pulley Wrench Set | E-Type E10 - E18 | 5 pcs.

- E10 - E12 - E14 - E16 - E18, length 460 mm
- 45° offset heads allow you to reach all areas in the engine bay
- space-saving, flat design
- ideal for screws of belt and tensioning pulley
- with slip guard handle for easy handling

Item #
1311



## Tensioner Pulley Wrench Set | 12-point 12 - 19 mm / E-Type E10 - E18 | 15 pcs.

- 12-point heads in the following sizes: 12, 13, 14, 15, 16, 17, 18 and 19 mm
- E-type heads in the following sizes: E10, E12, E14, E16, E18
- long wrench for easy handling
- quick connector 13.8 x 8.1 mm
- with slip guard handle for easy handling

Item #
1312



## Serpentine Belt Servicing Tool Kit | 10 mm (3/8") + 12.5 mm (1/2")

- combines the advantages of a ratcheting wrench with the requirements of the serpentine belt removal tool to provide best possible combination
- provides coverage for all major vehicles with serpentine belts
- metric sockets 8 - 12 - 13 - 14 - 17 - 18 - 24 mm
- inch sockets 10 mm (3/8") - 12,5 mm (1/2") - 5/8"

Item #
1706



## Belt Pully Wrench for V-Belt Pulleys

- for assembly of pulleys (counterholder)
- universally applicable
- 850 mm long strap

Item #
1024



## Belt Pulley Wrench for Ribbed and Flat Drive Belts

- for holding back ribbed drive belt pulleys (for example when loosening belt pulley bolts)



Item #
1026



## Belt Gauge

- for adjusting initial tension of the drive belt
- can be used for all types of cars as far as information on recommended tension are available
- 1 rotation of the adjusting nut changes the piston load approx. 10 N
- tension can be read on front and back side of the tool



Item #
1705



## Tensioner Pulley Wrench for V-ribbed Belts | 450 mm

- for loosening the automatic tensioner when changing the poly-V-belt
- for VW Golf, Passat, Polo, T4



Item #
1707

## Counterholding Wrench Set with adjustable Pins

- adjustable from 40 to 220 mm
- through the overall length of approx. 400 mm and the associated torque, ideal e. g. for loosening the fastening screw on injection pumps
- for locking the camshaft or diesel pump
- for belt and chain drives
- for tensioning and discharging of locking pins
- incl. 4 pairs of holding pins Ø 6 -10 mm, 8 - 11 mm, 10 - 12 mm, 11 - 16 mm to be used with nearly all camshaft sprockets
- length: 400 mm



Item #
1714