

2005 BMW Z4
2003-05 ENGINE Engine - Special Tools - Z4 (E85)

2003-05 ENGINE**Engine - Special Tools - Z4 (E85)****ENGINE****11 0 000 ENGINE LIFTER FOR REMOVING AND INSTALLING ENGINES****Minimum set: Mechanical tools**

Engine: M10, M47T2, M47TU, M52, M52TU, M54, M56, M60, M62, M67, M70, M73, N52, N62, N73, S14, S54, S62, W10, W11

SI number: 1 13 94 (888)

Order number: 11 0 000 Engine lifter for removing and installing engines

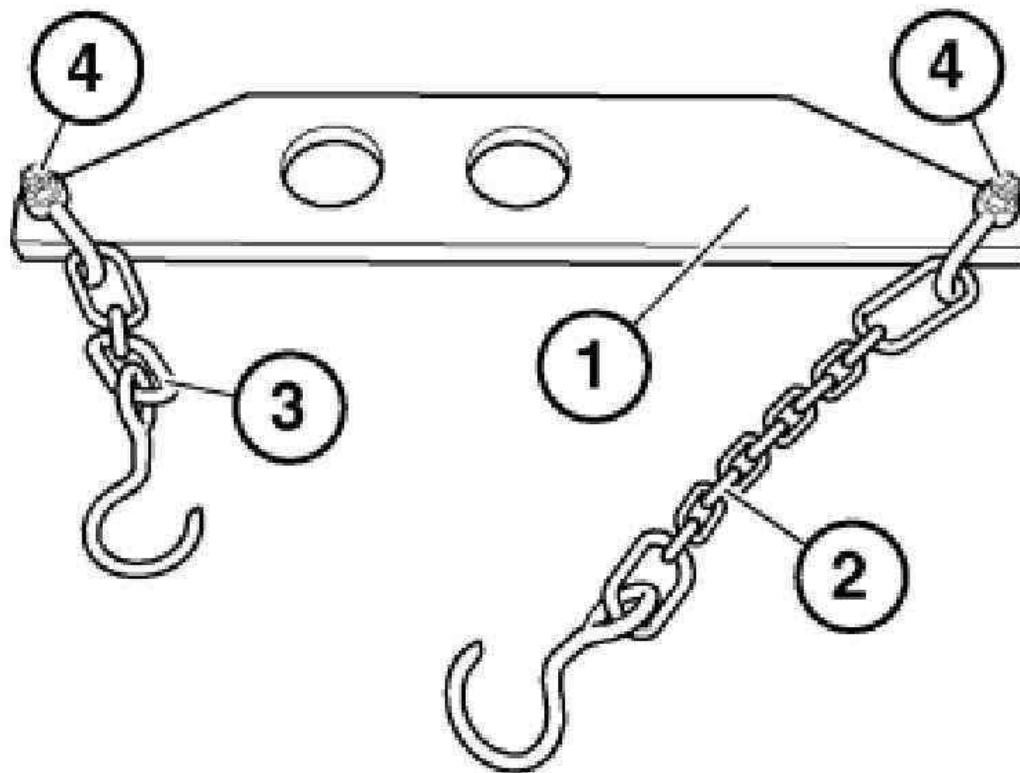
Consisting of:

1 = 11 0 001 Lifting beam

2 = 11 0 002 Chain, long

3 = 11 0 003 Chain, short

4 = 11 0 009 Shackle (2 x)



- | | |
|--------------|---------------|
| 1 = 11 0 001 | Lifting beam |
| 2 = 11 0 002 | Chain, long |
| 3 = 11 0 003 | Chain, short |
| 4 = 11 0 009 | Shackle (2 x) |

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Fig. 1: Identifying 11 0 000 Engine Lifter For Removing And Installing Engines
Courtesy of BMW OF NORTH AMERICA, INC.

11 0 020 ENGINE HOIST FOR REMOVING AND INSTALLING ENGINES

Minimum set: Mechanical tools

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Engine: M20, M20B25, M20B27, M21, M30, M30B34, M30Tur, M47TU, M50, M51, M52, M54, M57, M57D25, M57D30, M57TU, N52, N62, N73, S38, S50B30, S50B32, S50US, S85

SI number: 1 13 94 (888)

Order number: 11 0 020 Engine hoist for removing and installing engines

Consisting of:

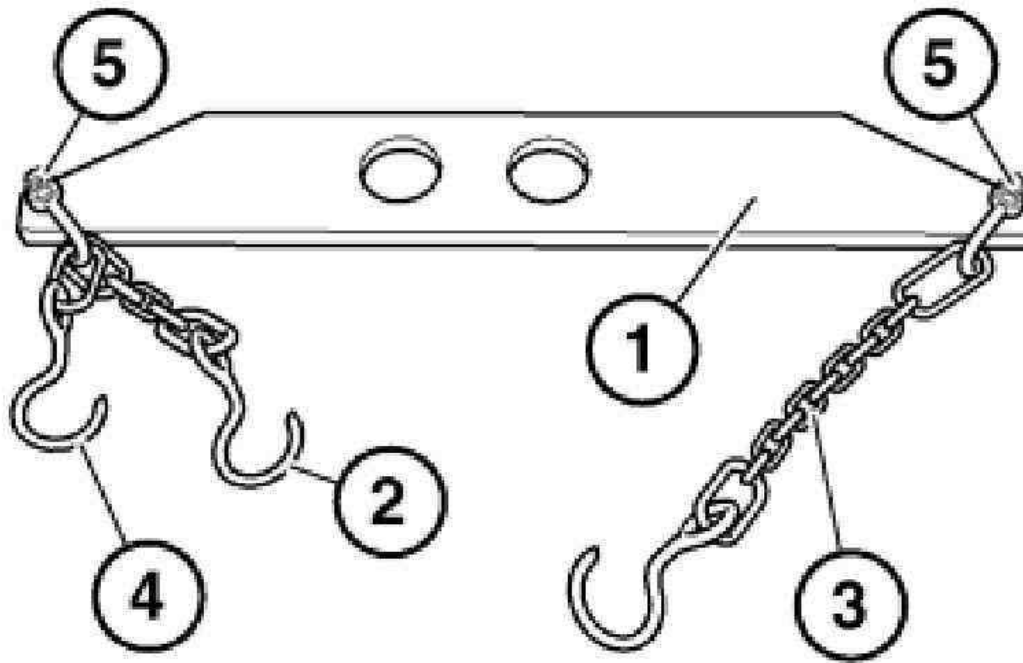
1 = 11 0 021 Lifting beam

2 = 11 0 022 Chain, medium

3 = 11 0 023 Chain, long

4 = 11 0 024 Chain, short

5 = 11 0 029 Shackle (2 x)



- | | |
|--------------|---------------|
| 1 = 11 0 021 | Lifting beam |
| 2 = 11 0 022 | Chain, medium |
| 3 = 11 0 023 | Chain, long |
| 4 = 11 0 024 | Chain, short |
| 5 = 11 0 029 | Shackle (2 x) |

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Fig. 2: Identifying 11 0 020 Engine Hoist For Removing And Installing Engines
Courtesy of BMW OF NORTH AMERICA, INC.

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2003-05 ENGINE Engine - Special Tools - Z4 (E85)

Note: For removing and installing engines

Engine: M10, M20, M20B25, M20B27, M21, M30, M30B34, M30Tur, M40, M41, M42, M43, M43TU, M44, M47, M47T2, M47TU, M50, M51, M52, M52TU, M54, M56, M57, M57D25, M57D30, M57T2, M57TU, M60, M62, M62VAN, M67, M67TU, M70, M73, M88, N40, N42, N45, N46, N52, N62, N73, S14, S38, S50B30, S50B32, S50US, S52US, S54, S62, S85, W10, W11, W17

SI number: 1 16 96 (107)

Order number: 11 0 070 Engine hoist

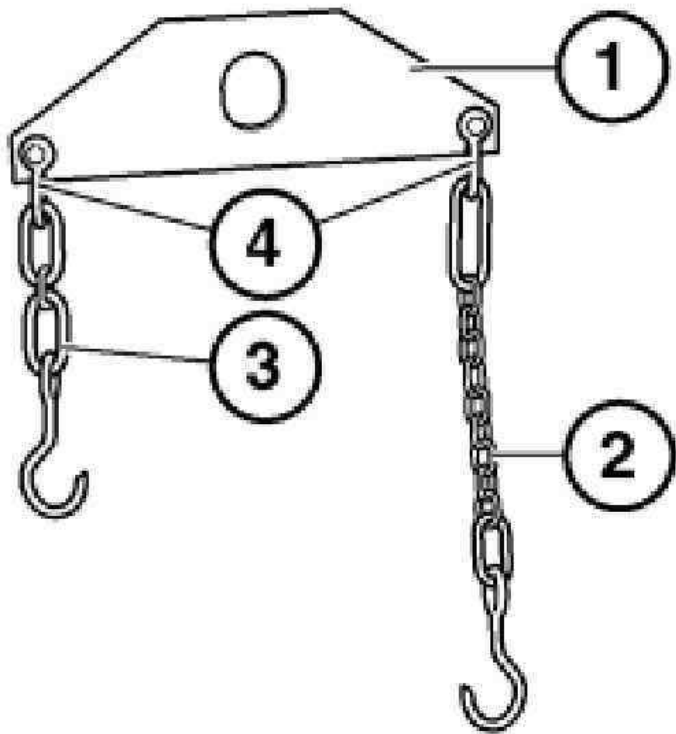
Consisting of:

1 = 11 0 071 Lifting beam

2 = 11 0 072 Carrying chain, long

3 = 11 0 073 Carrying chain, short

4 = 11 0 079 Shackle (2 x)



- | | |
|--------------|-----------------------|
| 1 = 11 0 071 | Lifting beam |
| 2 = 11 0 072 | Carrying chain, long |
| 3 = 11 0 073 | Carrying chain, short |
| 4 = 11 0 079 | Shackle (2 x) |

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Fig. 3: Identifying 11 0 070 Engine Hoist
Courtesy of BMW OF NORTH AMERICA, INC.

11 0 220 COMPRESSION TEST KIT

Minimum set: Mechanical tools

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Note: For all petrol/gasoline and diesel engines.

Engine: M10, M20, M20B25, M20B27, M21, M30, M30B34, M30Tur, M40, M41, M42, M43, M43TU, M44, M47, M47TU, M50, M51, M52, M52TU, M54, M56, M57, M57D25, M57D30, M57TU, M60, M62, M62VAN, M67, M67TU, M70, M73, M88, N40, N42, N62, N73, S14, S38, S50B30, S50B32, S50US, S52US, S54, S62, W10, W11, W17

SI number: 1 09 92 (558)

Order number: 11 0 220 Compression test kit

Consisting of:

16 = 11 0 239 Adapter

Note: Engine M67, M67TU

11 0 221 Compression recorder for diesel engines

11 0 222 Test probe

Note: For compression recorder 11 0 221 and 11 0 160 / Engine: M21, M41, M47, M51, M57

In conjunction with: 11 0 240

11 0 223 Test sheets (100 x)

Note: For compression recorder for 11 0 221

11 0 224 Compression recorder for petrol/gasoline engines

11 0 226 Test probe

Note: For compression recorder 11 0 224 and 11 0 160 / engine: M10, M20, M30, M40, M42, M43, M44, M50, M52, M60, M62, M70, M73, S50US, S52US, S62

In conjunction with: 11 0 240

11 0 228 Rubber taper with fitting

Note: For compression recorder 11 0 224 and 11 0 160 / engine: M10, M20, M30

In conjunction with: 11 0 240

11 0 229 Test charts (100 x)

Note: For compression recorder 11 0 224

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11 0 231 Case

Note: With foam inlay for compression recorder

11 0 233 Non-return valve

11 0 234 Filter 3 x 3 mm

11 0 235 Test probe, screw-in

Note: For measuring "absolute compression" at all cylinders, engine: S14, S38, S50B30, S50B32, S50US, S52US, S54

In conjunction with: DIS and DIS pressure sensor

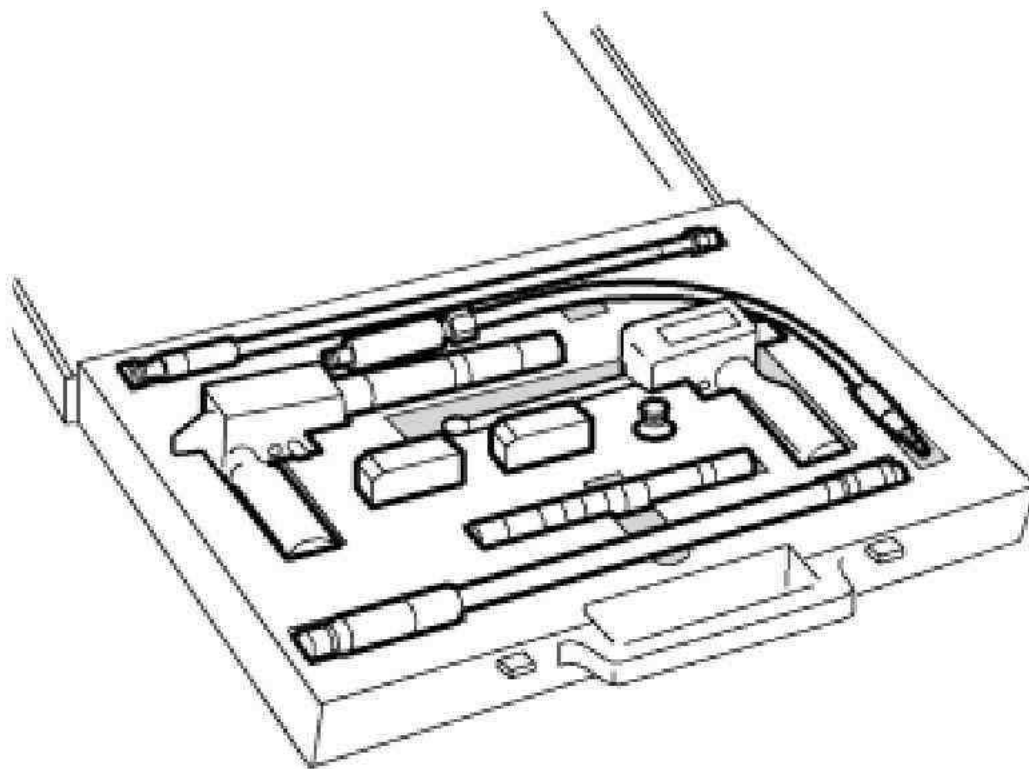
11 0 236 Test probe

Note: For compression recorder 11 0 221 or DIS pressure sensor / engine: M47, M57, M57TU

11 0 237 Adapter

Note: For measuring "absolute compression" at all cylinders. Engine: W17

In conjunction with: 11 0 221, 11 0 235 or DIS pressure sensor, 11 0 235



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Fig. 4: Identifying 11 0 220 Compression Test Kit
Courtesy of BMW OF NORTH AMERICA, INC.

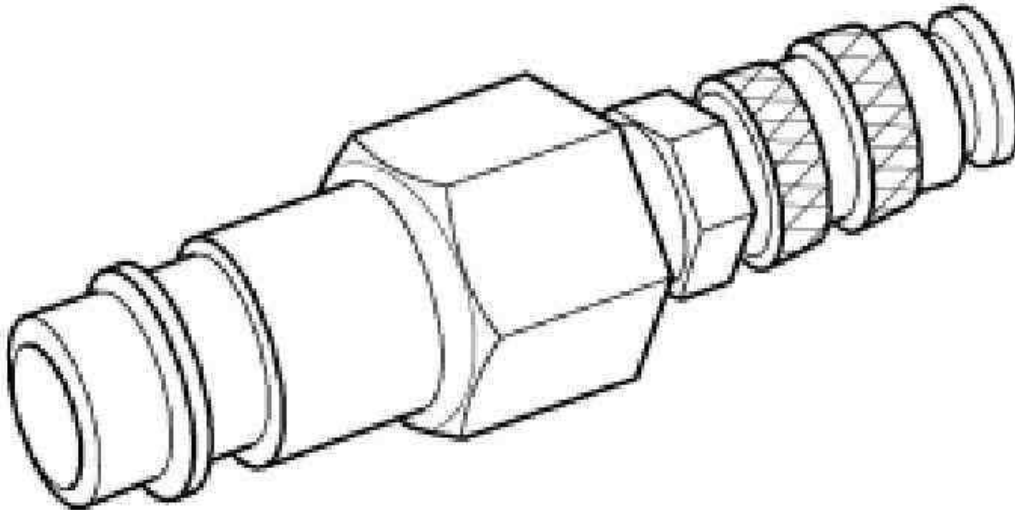
11 0 240 COUPLING

In conjunction with: 11 0 222, 11 0 226, 11 0 227, 11 0 225

Note: For adapting test probes to pressure gauge 11 0 162

Engine: All models

Order number: 11 0 240 Coupling



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Fig. 5: Identifying 11 0 240 Coupling
Courtesy of BMW OF NORTH AMERICA, INC.

11 1 200 DRIFT

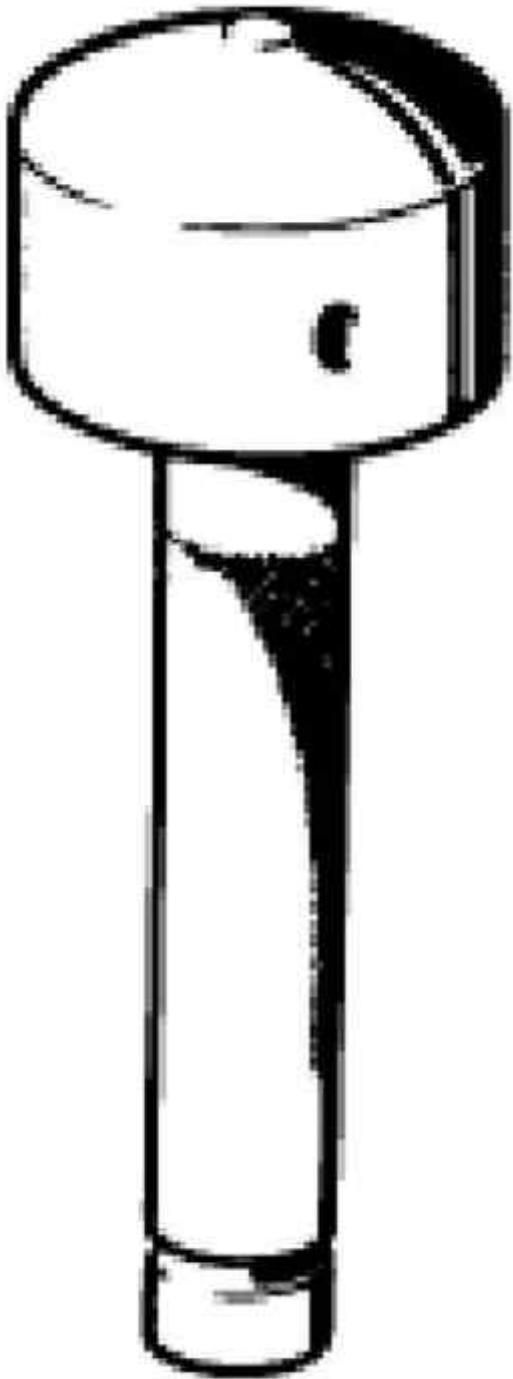
Minimum set: Mechanical tools

Note: For fitting valve stem seals

Engine: M20, M21, M40, M41, M42, M43, M44, M50, M51, M52, M52TU, M54, M56, M60, M62, M70, M73, S14, S38, S50B30, S50B32, S54, S62

Storage location: B14, C14

Order number: 11 1 200 Drift



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Fig. 6: Identifying 11 1 200 Drift
Courtesy of BMW OF NORTH AMERICA, INC.

11 1 310 DRIFT

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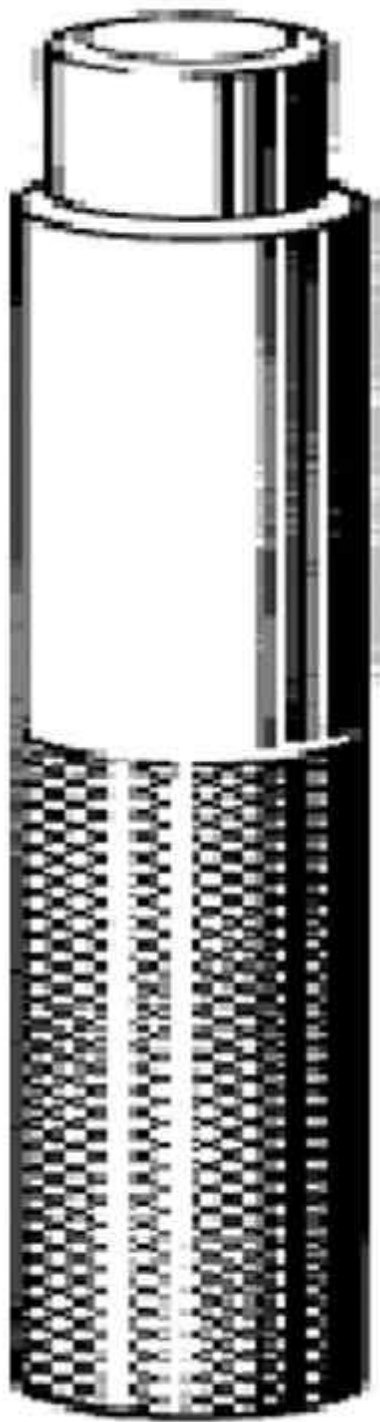
Note: For driving needle bearing out of crankcase (M20) and pressing out propeller shaft centering mount

Series: E28, E30, E38, E39, E46, E52, E65, E66, E85, E87, E90, RR1

Order number: 11 1 310 Drift

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Fig. 7: Identifying 11 1 310 Drift
Courtesy of BMW OF NORTH AMERICA, INC.

11 1 480 PLIERS

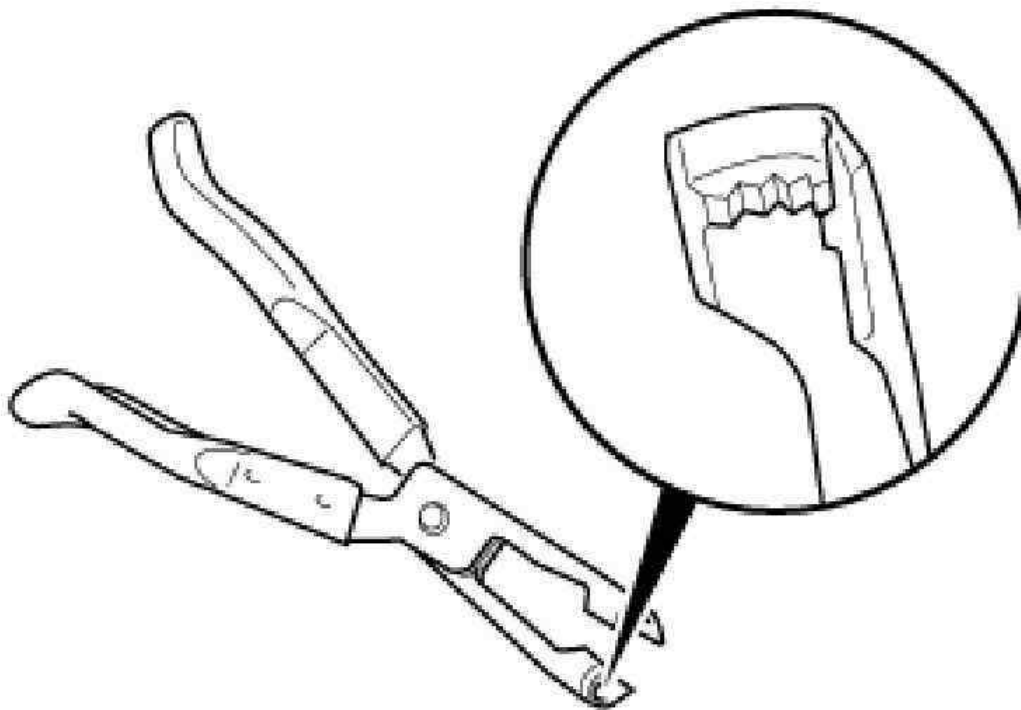
Minimum set: Mechanical tools

Note: For removing valve stem seal Engine: M40, M41, M42, M43, M44, M50, M51, M52, M52TU, M54, M56, M60, M62, M70, M73, N52, S38, S50B30, S50B32, S50US, S52US, S54, S62, W10, W11

Storage location: A10, B10

SI number: 1 01 93(621)

Order number: 11 1 480 Pliers



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Fig. 8: Identifying 11 1 480 Pliers

Courtesy of BMW OF NORTH AMERICA, INC.

11 1 960 ASSEMBLY SLEEVES

Minimum set: Mechanical tools

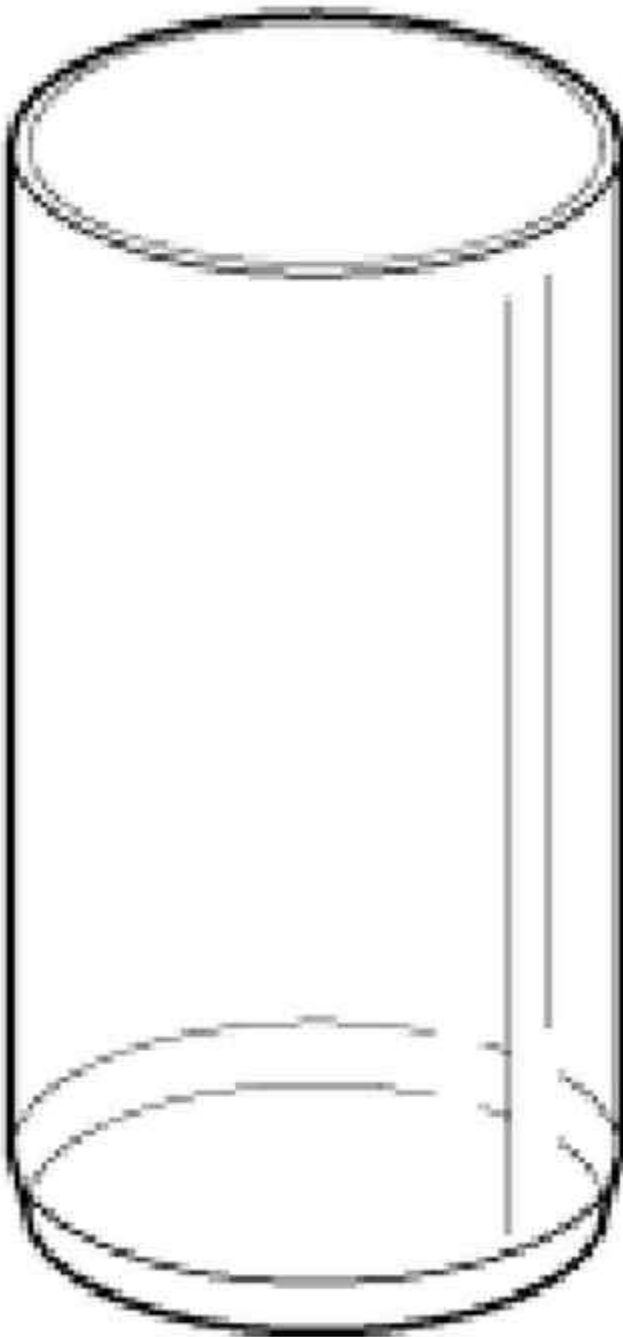
Note: For fitting valve stem seals, 6 mm diameter

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Engine: M41, M42, M44, M47, M50, M51, M52, M52TU, M54, M56, M57, M57TU, M60, M62, S54, S62

Order number: 11 1 960 Assembly sleeves



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Fig. 9: Identifying 11 1 960 Assembly Sleeves

Courtesy of BMW OF NORTH AMERICA, INC.

11 2 030 DRIFT

Minimum set: Mechanical tools

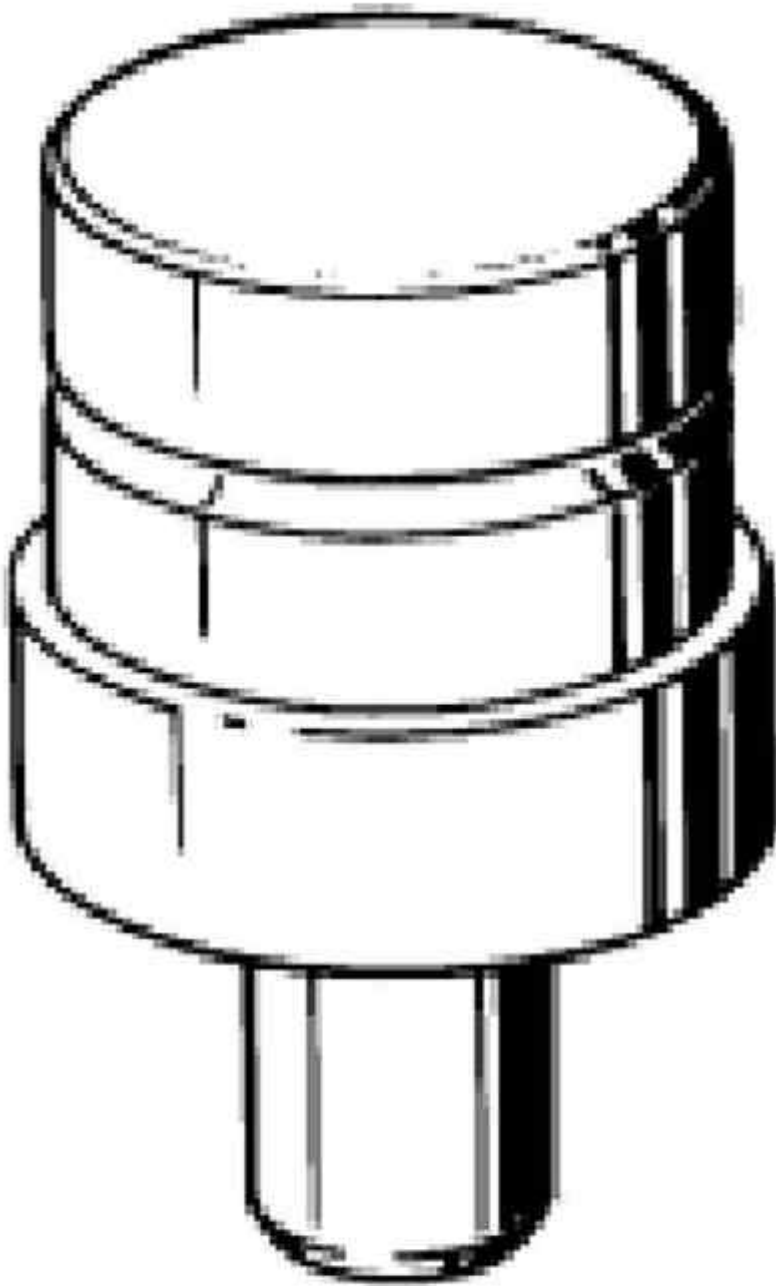
In conjunction with: 00 5 500

Note: For driving the guide bearing into the crankshaft (S14, S38, M10, M20, M21, M30, M40, M42, M50, M51 M52) and driving the centering support into the propeller shaft

Series: E28, E30, E32, E34, E36, E38, E39, E46, E52, E65, E66, E85, E87, E90, RR1

Storage location: A28

Order number: 11 2 030 Drift



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Fig. 10: Identifying 11 2 030 Drift
Courtesy of BMW OF NORTH AMERICA, INC.

11 2 170 HOLDER

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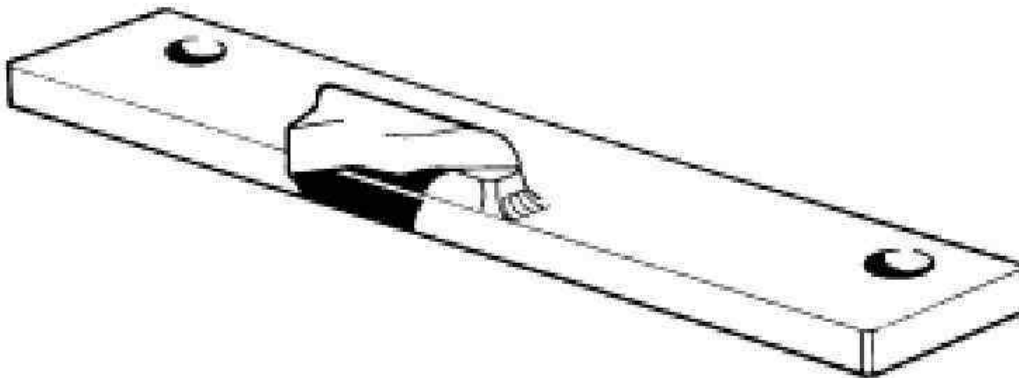
Minimum set: Mechanical tools

Note: For locking flywheel in position

Engine: M20, M21, M40, M41, M42, M43, M44, M47, M47TU, M50, M51, M52, M52TU, M54, M56, M57, S50B30, S50B32, S54

Storage location: C4

Order number: 11 2 170 Holder



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Fig. 11: Identifying 11 2 170 Holder
Courtesy of BMW OF NORTH AMERICA, INC.

11 2 260 PISTON RING COMPRESSOR

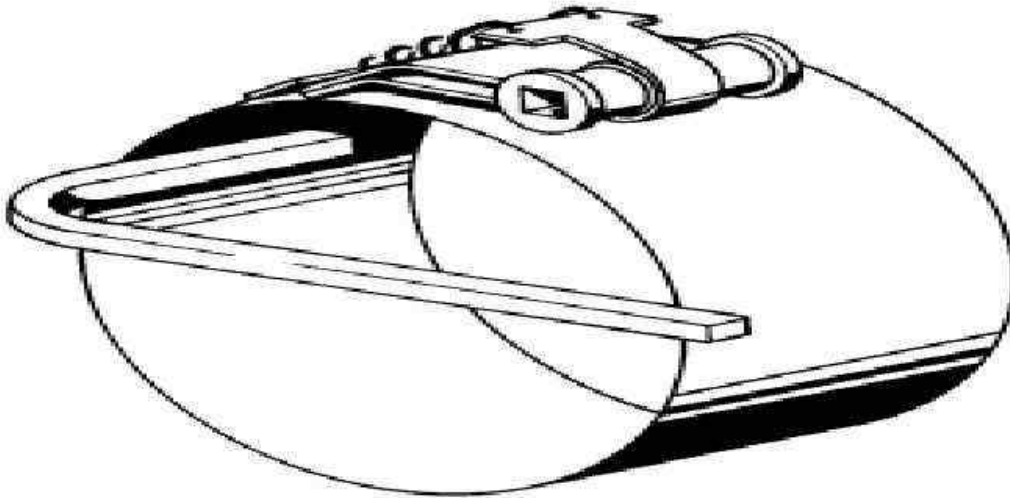
Minimum set: Mechanical tools

Note: For compressing piston rings while installing pistons

Engine: M47T2, M47TU, M52, M52TU, M54, M56, M57, M57TU, M60, M62, S14, S38

Storage location: C1

Order number: 11 2 260 Piston ring compressor



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Fig. 12: Identifying 11 2 260 Piston Ring Compressor
Courtesy of BMW OF NORTH AMERICA, INC.

11 2 300 PLUG MANDREL

Minimum set: Mechanical tools

Note: For locking crankshaft in ignition TDC position when adjusting timing

Engine: M21, M40, M41, M42, M43, M43TU, M44, M47, M47TU, M50, M51, M52, M52TU, M54, M56, M57, M57TU, M60, M62, M70, M73, S50B30, S50B32, S54, S62

Storage location: C32

Order number: 11 2 300 Plug mandrel

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Fig. 13: Identifying 11 2 300 Plug Mandrel
Courtesy of BMW OF NORTH AMERICA, INC.

11 2 340 EXTRACTOR

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Minimum set: Mechanical tools

In conjunction with: 11 2 016 (M60, M62)

Note: For guide bearing in crankshaft, stem diameter 15 mm

Engine: M41, M42, M43, M43TU, M44, M47, M47TU, M50, M51, M52, M52TU, M54, M56, M57, M57TU, M60, M62, M70, M73, N40, N42, N45, N46, S50B30, S50B32, S54, S62, S85

Storage location: C26

SI number: 1 05 90(207)

Order number: 11 2 340 Extractor

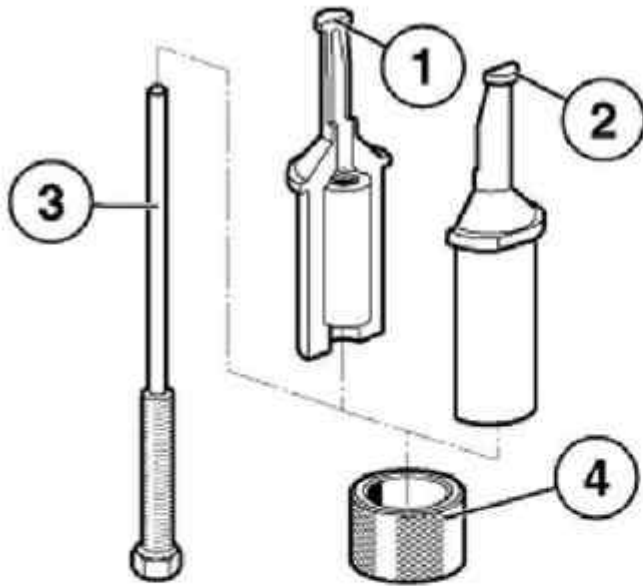
Consisting of:

1 = 11 2 341 Extractor claw with threaded bush

2 = 11 2 342 Extractor claw

3 = 11 2 343 Pressure spindle

4 = 11 2 344 Sleeve



1 = 11 2 341 Extractor claw with threaded bush

2 = 11 2 342 Extractor claw

3 = 11 2 343 Pressure spindle

4 = 11 2 344 Sleeve

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Fig. 14: Identifying 11 2 340 Extractor

Courtesy of BMW OF NORTH AMERICA, INC.

11 2 350 DRIFT

Minimum set: Mechanical tools

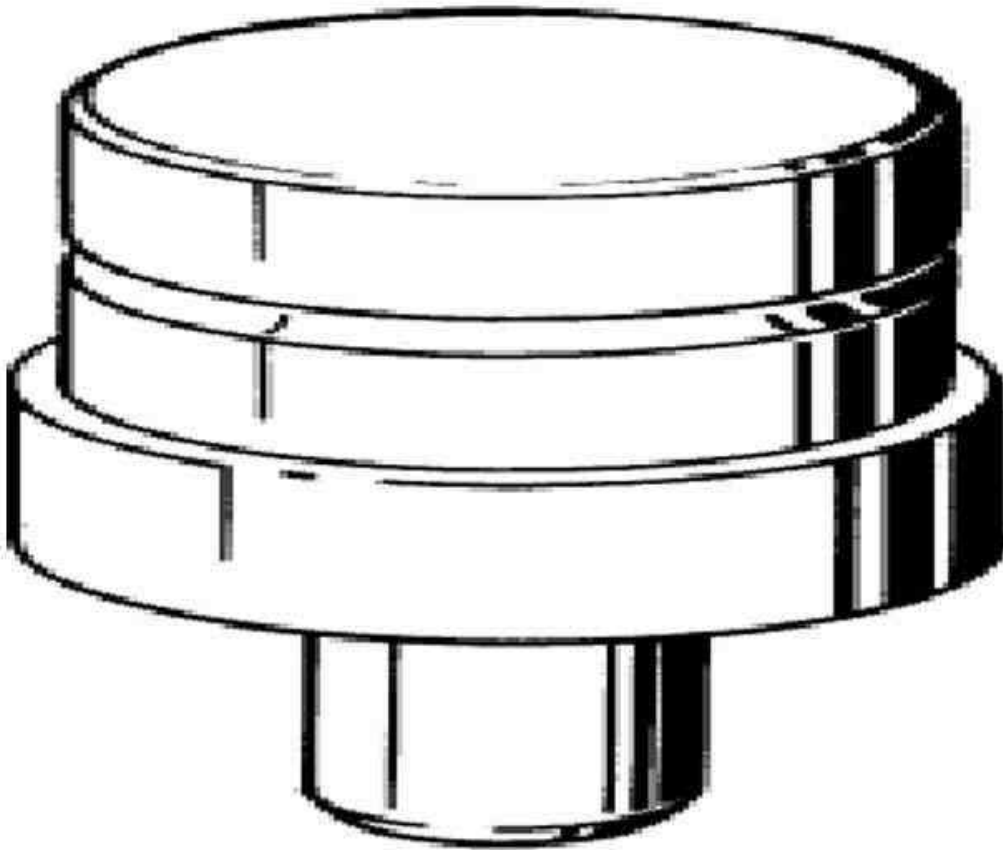
Note: For fitting guide bearing of crankshaft

Engine: M41, M42, M43, M44, M47, M47TU, M50, M51, M52, M52TU, M54, M57, M57TU, M60, M62, M70, M73, N40, N42, N45, N46, S50B30, S50B32, S52US, S54, S62, S85

Storage location: A28

SI number: 1 05 90(207)

Order number: 11 2 350 Drift



G03296918

Fig. 15: Identifying 11 2 350 Drift

Courtesy of BMW OF NORTH AMERICA, INC.

11 2 380 PULLER

Minimum set: Mechanical tools

Note: For removing rotary shaft seal from timing case cover

Engine: M41, M47, M50, M51, M52, M52TU, M54, M56, M60, M62, S50B30, S50B32, S54, S62, W10, W11

Storage location: A38, C25

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SI number: 1 05 92(507)

Order number: 11 2 380 Puller

Consisting of:

1 = 11 2 381 Threaded bell housing

2 = 11 2 382 Spindle

3 = 11 2 383 Thrust piece

Note: Engine: M41, M47, M50, M51, M52, M60, M62, PENT

11 2 384 Thrust piece

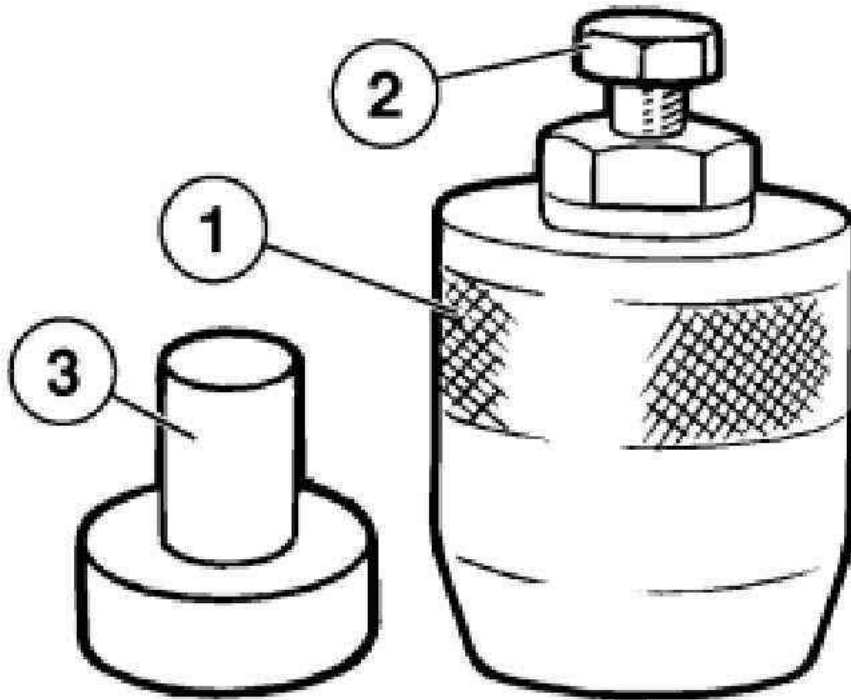
Note: Engine: S50, S54

11 2 385 Spacer bushing

Note: Engine: M41, M50, M51, M52

11 2 386 Thrust piece

Note: Engine: S62



1 = 11 2 381

Threaded bell housing

2 = 11 2 382

Spindle

3 = 11 2 383

Thrust piece

G03296919

Fig. 16: Identifying 11 2 380 Puller

Courtesy of BMW OF NORTH AMERICA, INC.

11 2 470 GUIDE MANDREL (2)

Minimum set: Mechanical tools

Note: For installing connecting rods with piston

Engine: M40, M41, M50, M52, M52TU, M54, M56, M60, M62

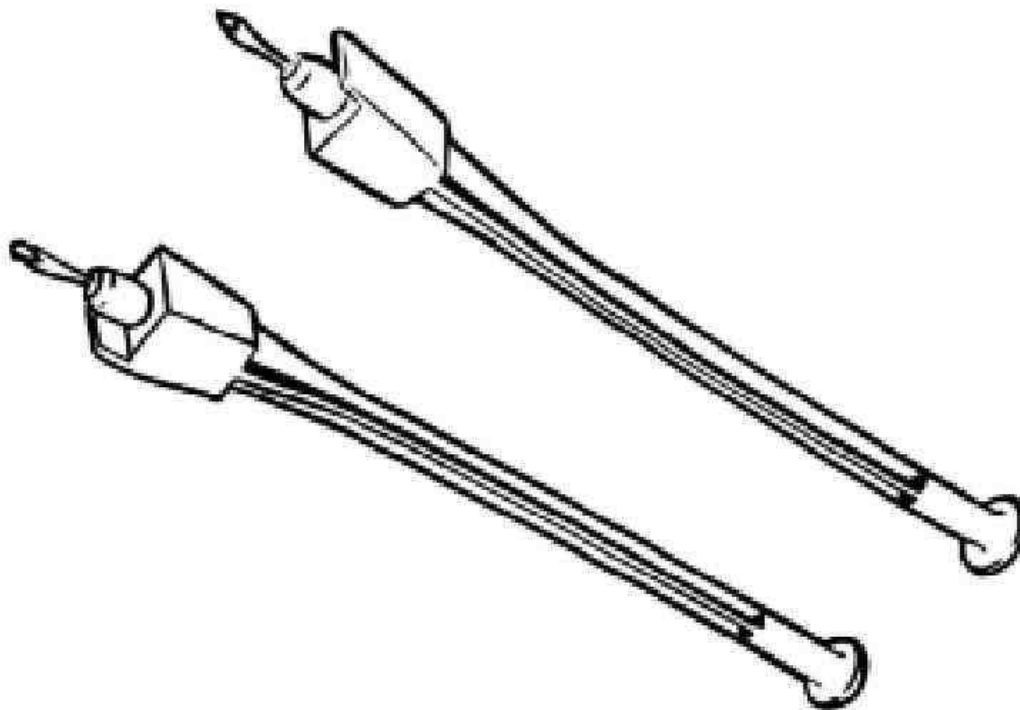
2005 BMW Z4

2003-05 ENGINE Engine - Special Tools - Z4 (E85)

Storage location: B2, C2

SI number: 1 05 92(507)

Order number: 11 2 470 Guide mandrel (2)



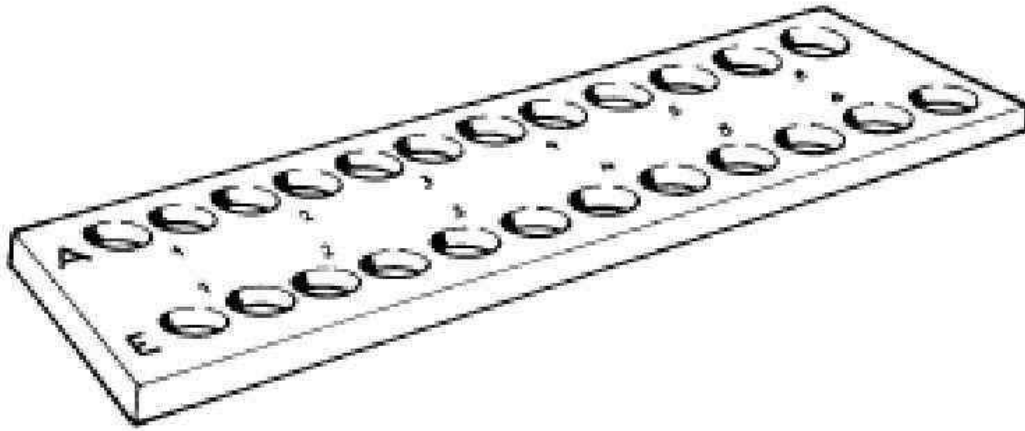
G03296920

Fig. 17: Identifying 11 2 470 Guide Mandrel (2)
Courtesy of BMW OF NORTH AMERICA, INC.

11 3 030 PLACEMENT BOARD FOR TAPPET

Engine: M10, M20, M21, M30, M40, M41, M42, M43, M44, M50, M51, M52, M52TU, M54, M56, M60, M62, M70, M73, M88, S14, S38, S50B30, S50B32, S62

Order number: 11 3 030 Placement board for tappet



G03296921

Fig. 18: Identifying 11 3 030 Placement Board For Tappet
Courtesy of BMW OF NORTH AMERICA, INC.

11 3 240 LOCKING FIXTURE

Minimum set: Mechanical tools

Note: For locking camshaft in position when adjusting timing

Engine: M42, M44, M50, M52, M52TU, M54, M56, S50US, S52US

Storage location: A11

SI number: 1 05 89(099)

Order number: 11 3 240 Locking fixture

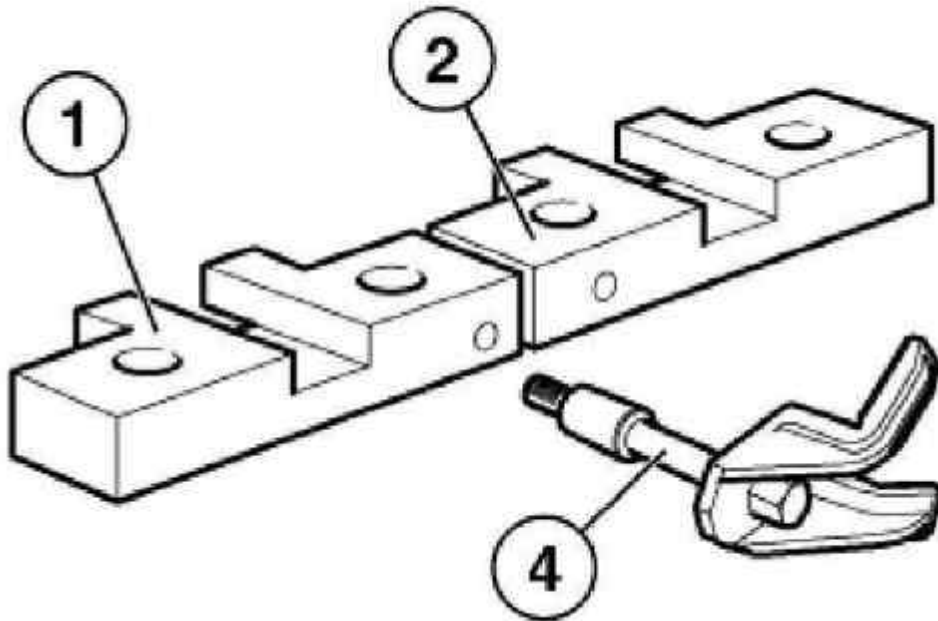
Consisting of:

1 = 11 3 241 Gauge for inlet side

2 = 11 3 242 Gauge for exhaust side

4 = 11 3 244 Support bracket

Note: For securing camshaft marking fixture on cylinder head



1 = 11 3 241

Gauge for inlet side

2 = 11 3 242

Gauge for exhaust side

4 = 11 3 244

Support bracket

G03296922

Fig. 19: Identifying 11 3 240 Locking Fixture
Courtesy of BMW OF NORTH AMERICA, INC.

11 3 250 SUCTION CUP

Minimum set: Mechanical tools

Note: For lifting out tappets in cylinder head

Engine: M40, M41, M42, M43, M44, M50, M51, M52, M52TU, M54, M56, M60, M62, S62

Storage location: A 104

SI number: 1 05 89(099)

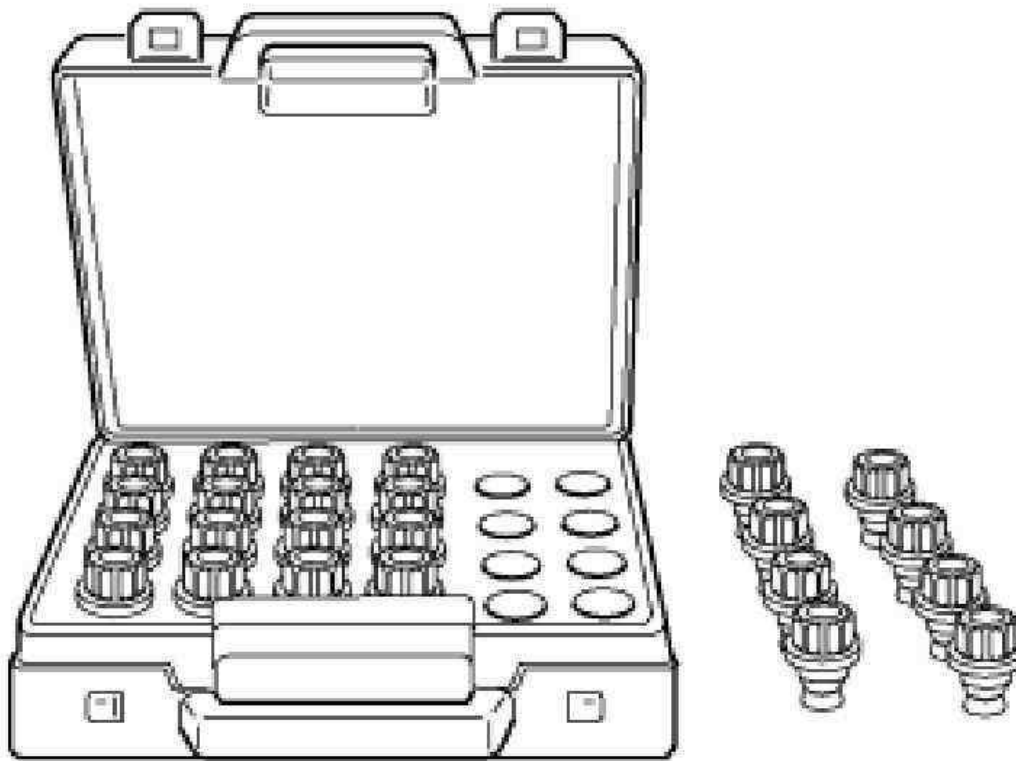
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Order number: 11 3 250 Suction cup

Consisting of:

1 = 11 3 251 Sucker (8 x)



G03296923

Fig. 20: Identifying 11 3 250 Suction Cup
Courtesy of BMW OF NORTH AMERICA, INC.

11 3 260 FIXTURE

Minimum set: Mechanical tools

Note: For evenly pressing down camshaft (with bearing cap) while releasing and tightening camshaft bearing caps

Engine: M42, M50, M52, M52TU, M54, M56, S50US, S52US

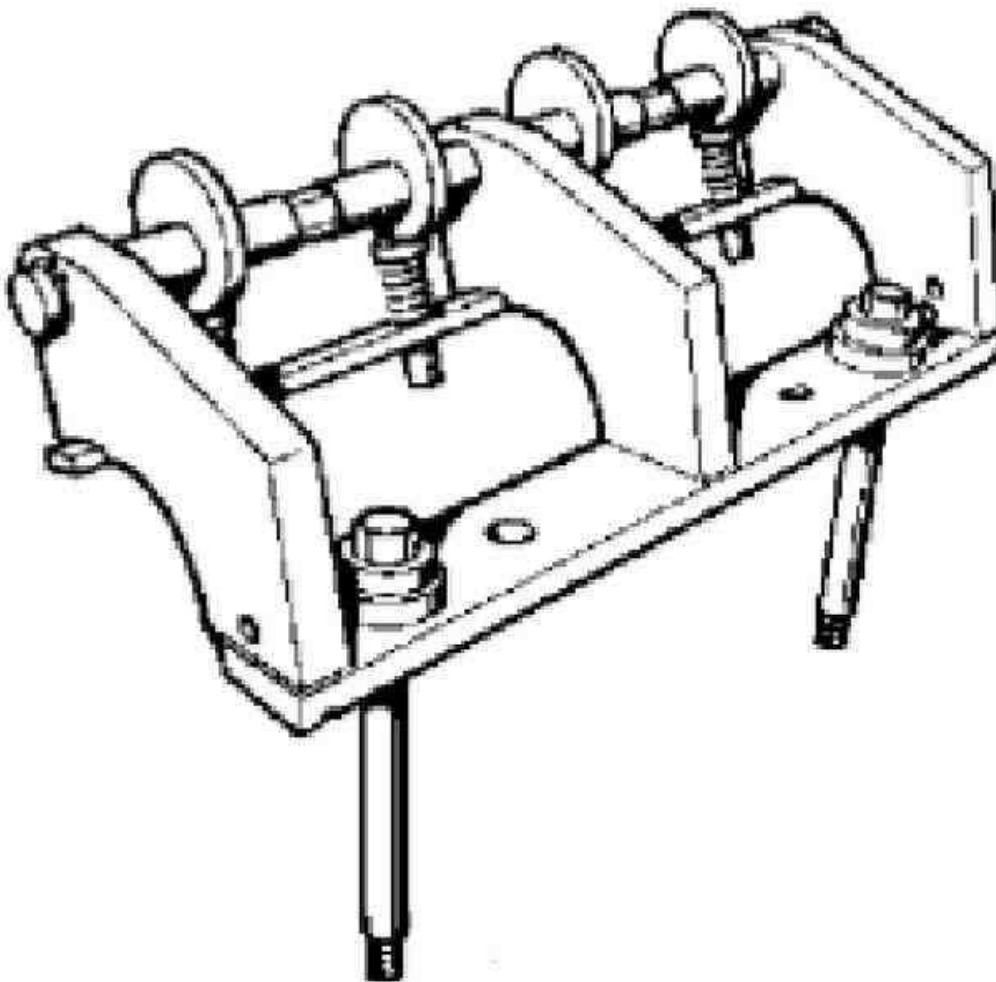
SI number: 1 05 89(099)

Order number: 11 3 260 Fixture

Consisting of:

1 = 11 3 261 Assembly fixture

2 = 11 3 262 Fastener bolt (2)



G03296924

Fig. 21: Identifying 11 3 260 Fixture

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Courtesy of BMW OF NORTH AMERICA, INC.

11 3 280 INSTALLER BUSH

Minimum set: Mechanical tools

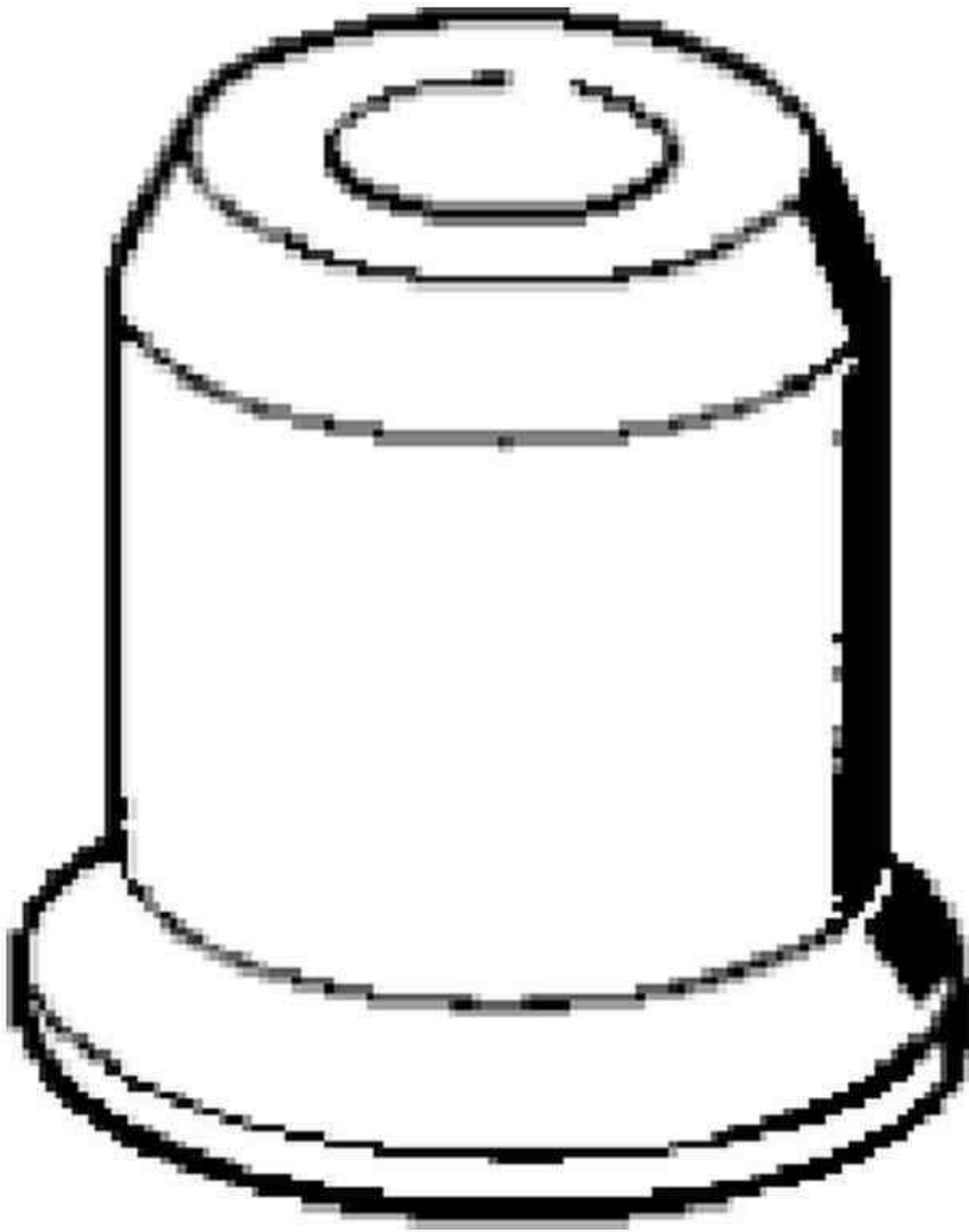
Note: For fitting rotary shaft seal in bottom of timing case

Engine: M50, M51, M52, M52TU, M54, M56, S50B30, S50B32

Storage location: C28

SI number: 1 01 90(165)

Order number: 11 3 280 Installer bush



G03296925

Fig. 22: Identifying 11 3 280 Installer Bush
Courtesy of BMW OF NORTH AMERICA, INC.

11 3 450 COMPRESSED AIR CONNECTION

Minimum set: Mechanical tools

In conjunction with: 12 6 410

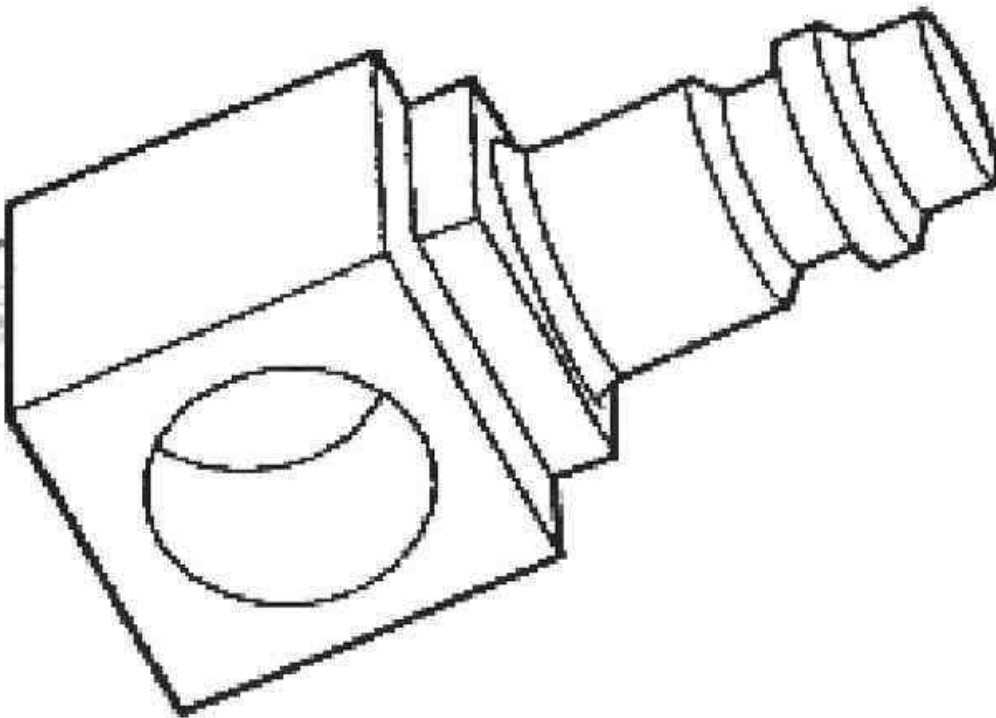
Note: For checking function of VANOS adjustment unit

Engine: M50, M52, M52TU, M54, M56, N73

Storage location: B10

SI number: 1 08 92 (555)

Order number: 11 3 450 Compressed air connection



G03296926

11 3 480 GUIDE MANDREL (2)**Minimum set: Mechanical tools**

Note: For installing connecting rods with pistons.

Note: With the phase-in of engine S50B32 the guide mandrels have been revised and adapted to the new connecting rods.

Engine: M44, M52, M52TU, M54, M56, S50B30, S50B32, S62

Storage location: B2, C2

SI number: 1 12 92(606)

Order number: 11 3 480 Guide mandrel (2)

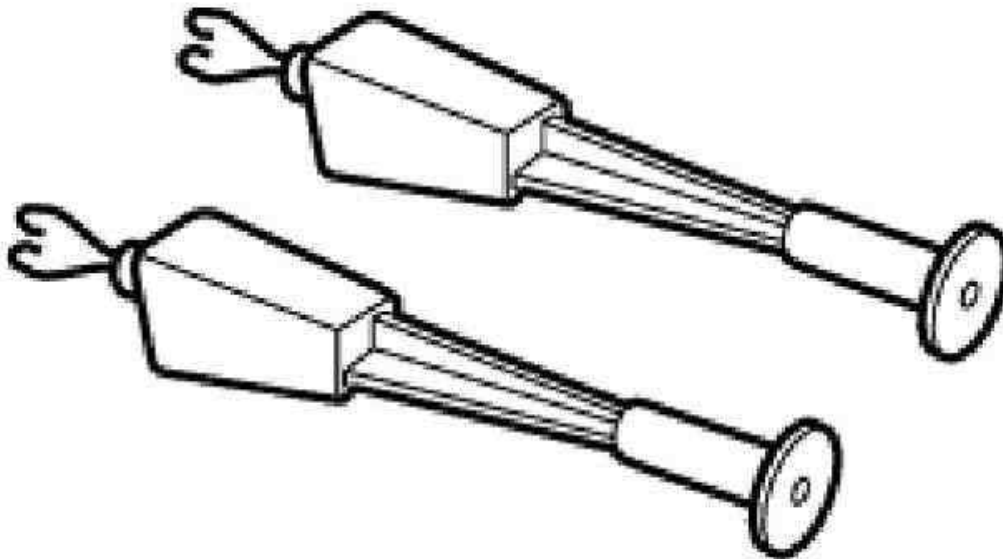
**G03296927**

Fig. 24: Identifying 11 3 480 Guide Mandrel (2)
Courtesy of BMW OF NORTH AMERICA, INC.

11 4 050 REDUCER

2005 BMW Z4
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Minimum set: Mechanical tools

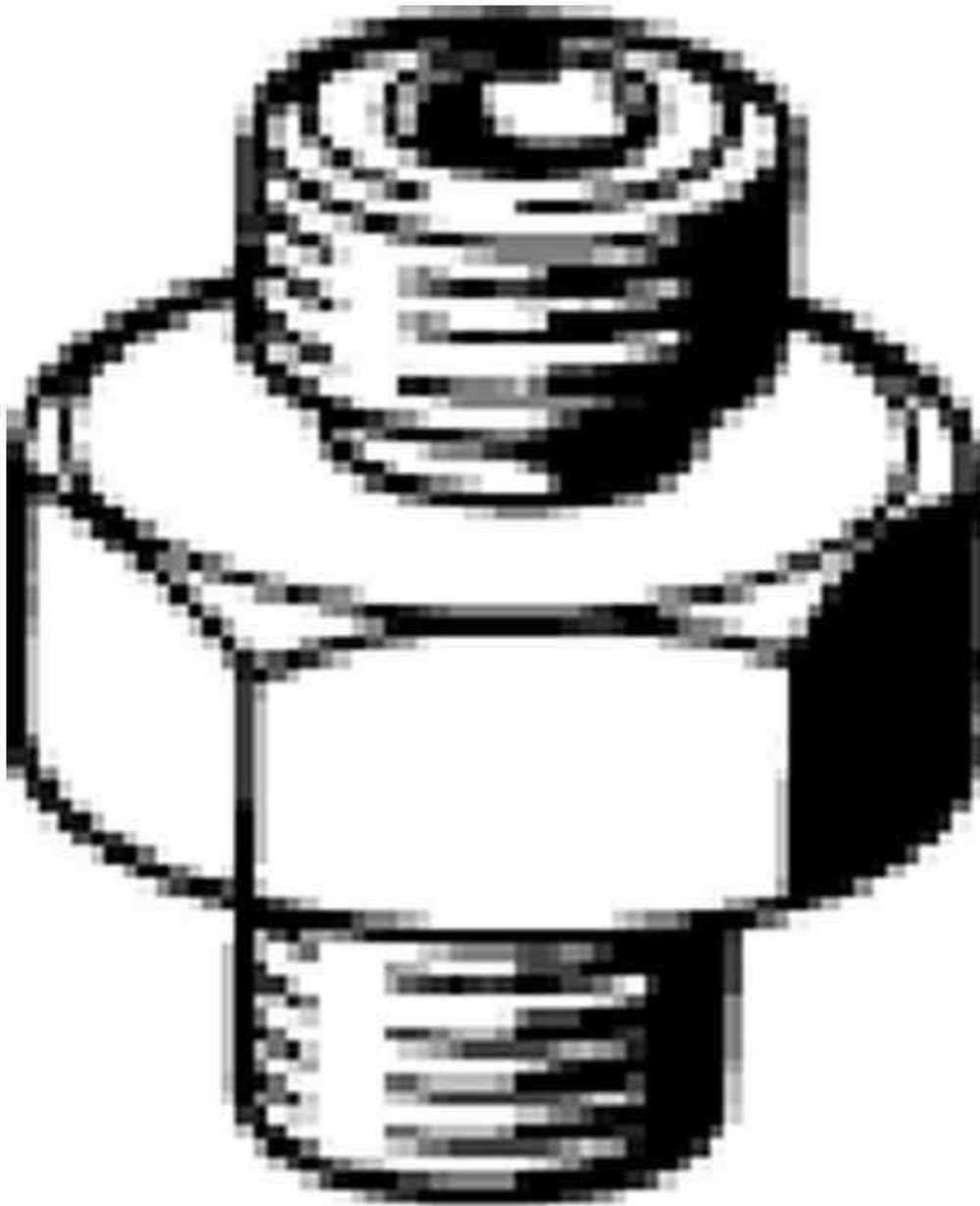
In conjunction with: 13 3 063 or 13 6 051

Note: For connection of pipe bend 13 6 054 to pressure gauge 13 3 061 or BMW DIS for checking oil pressure

Engine: M10, M20, M21, M30, M47, M47T2, M47TU, M50, M51, M52, M54, M56, M57, M57TU, M60, M62, M70, M73, N62, N73, S14, S38, S50B30, S50B32, S62

Storage location: B9

Order number: 11 4 050 Reducer



G03296928

Fig. 25: Identifying 11 4 050 Reducer
Courtesy of BMW OF NORTH AMERICA, INC.

11 4 190 1/4" EXTENSION PIECE

Minimum set: Mechanical tools

In conjunction with: 11 3 390, 00 2 050

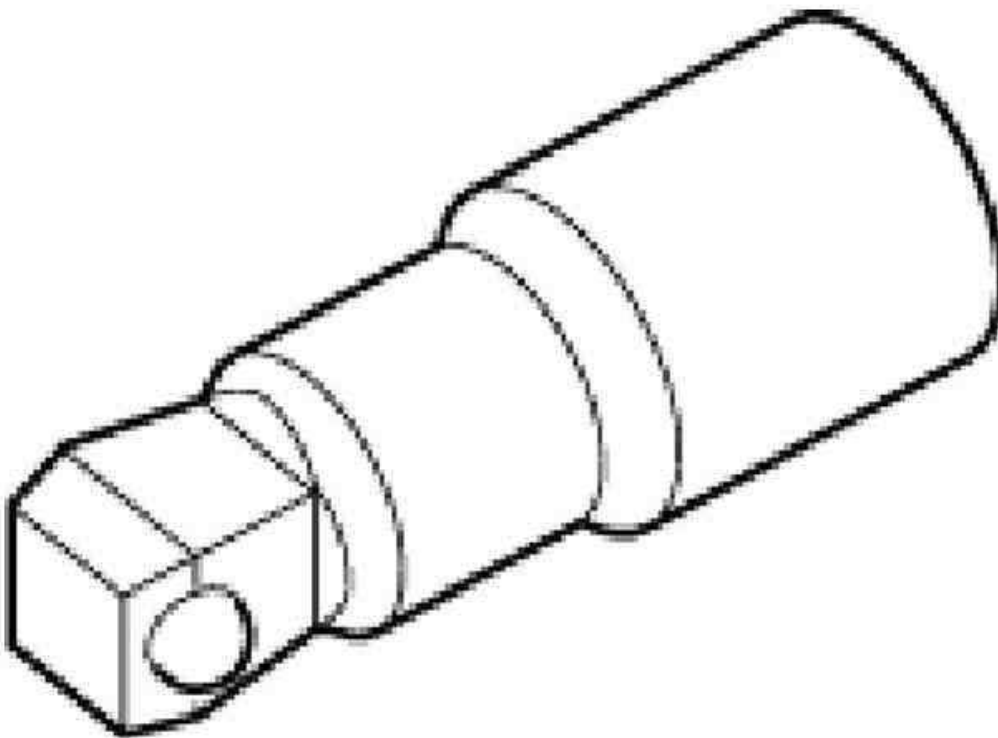
Note: M73 For removing and installing pedal travel sensor M60 Pretensioning timing chain E53 Mounting airbag control unit

Series: All models

Storage location: B6

SI number: 1 06 94(801)

Order number: 11 4 190 1/4" extension piece



G03296929

Fig. 26: Identifying 11 4 190 1/4" Extension Piece
Courtesy of BMW OF NORTH AMERICA, INC.

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11 4 220 CHAIN TENSIONER

Minimum set: Mechanical tools

In conjunction with: 00 9 250, 00 2 050

Note: For tensioning primary chain when adjusting valve timing

Engine: M52, M52TU, M54, M56

Storage location: C27

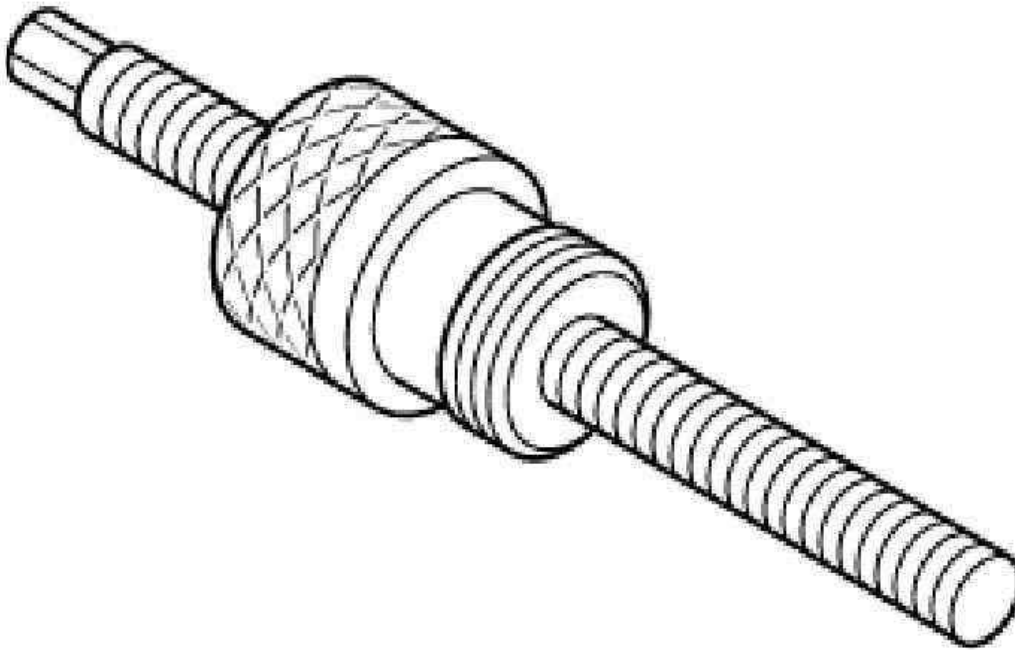
SI number: 1 10 94(840)

Order number: 11 4 220 Chain tensioner

Consisting of:

1 = 11 4 221 Holding sleeve

3 = 11 4 223 Spindle



G03296930

Fig. 27: Identifying 11 4 220 Chain Tensioner
Courtesy of BMW OF NORTH AMERICA, INC.

11 4 230 CHAIN TENSIONER

Minimum set: Mechanical tools

Note: For tensioning primary chain when adjusting valve timing

Engine: M52TU, M54, M56, M62, M62VAN, N40, N42

Storage location: A40

SI number: 1 15 99(483)

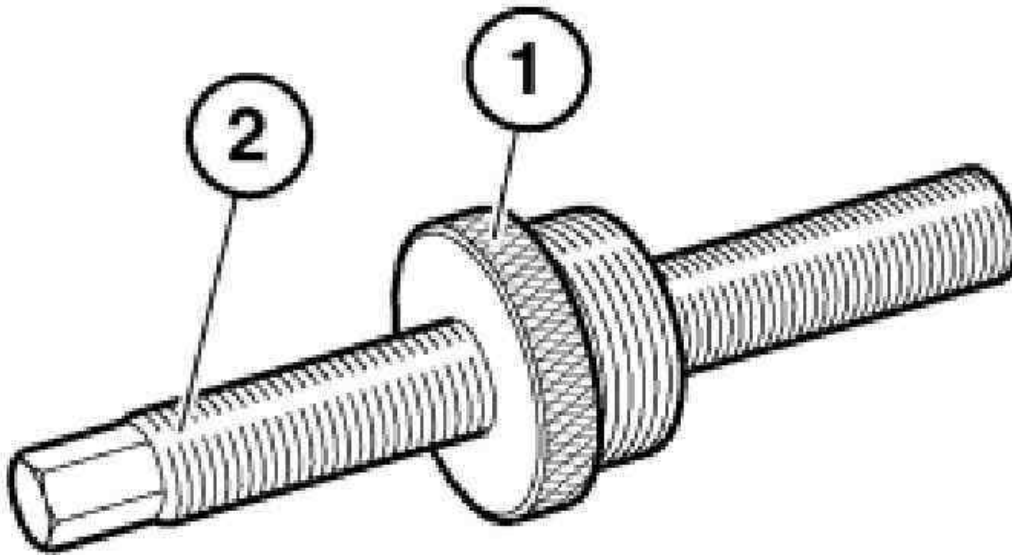
Order number: 11 4 230 Chain tensioner

Consisting of:

1 = 11 4 231 Nut

Note: With external thread

2 = 11 4 232 Spindle



1 = 11 4 231

Nut

2 = 11 4 232

Spindle

G03296931

Fig. 28: Identifying 11 4 230 Chain Tensioner
Courtesy of BMW OF NORTH AMERICA, INC.

11 5 030 HOLDER

Minimum set: Mechanical tools

Note: For pulley on water pump when releasing and tightening fan / Model year: From 80

Engine: M10, M20, M21, M30, M50, M51, M52, M52TU, M54, M56, M70, M73, S14, S38, S50B30, S50B32, S54

Storage location: B3, C3

2005 BMW Z4

2003-05 ENGINE Engine - Special Tools - Z4 (E85)

Order number: 11 5 030 Holder



G03296032

Fig. 29: Identifying 11 5 030 Holder
Courtesy of BMW OF NORTH AMERICA, INC.

11 5 040 OPEN-ENDED SPANNER WAF 32**Minimum set: Mechanical tools**

In conjunction with: Torque wrench 3/8" connection

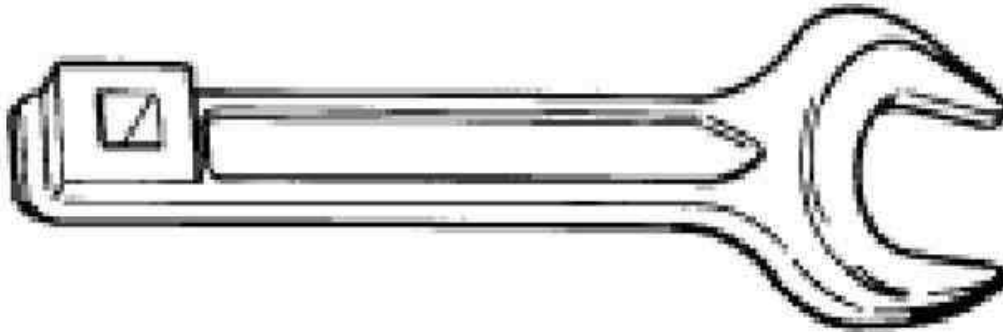
Note: For loosening and tightening fan wheel

Engine: M10, M20, M21, M30, M40, M41, M42, M43, M44, M47, M47TU, M50, M51, M52, M52TU, M54, M56, M57, M60, M62, M70, M73, M88, N42, N62, S14, S38, S50B30, S50B32, S50US, S52US, S54, S62

Storage location: A11, B11

SI number: 1 01 87(670)

Order number: 11 5 040 Open-ended spanner WAF 32



G03296933

Fig. 30: Identifying 11 5 040 Open-Ended Spanner WAF 32
Courtesy of BMW OF NORTH AMERICA, INC.

11 5 180 PLUG MANDREL, ANGLED**Minimum set: Mechanical tools**

Note: For locking flywheel in TDC position

Engine: M47T2, M54, M57TU, M62, M62VAN, M67

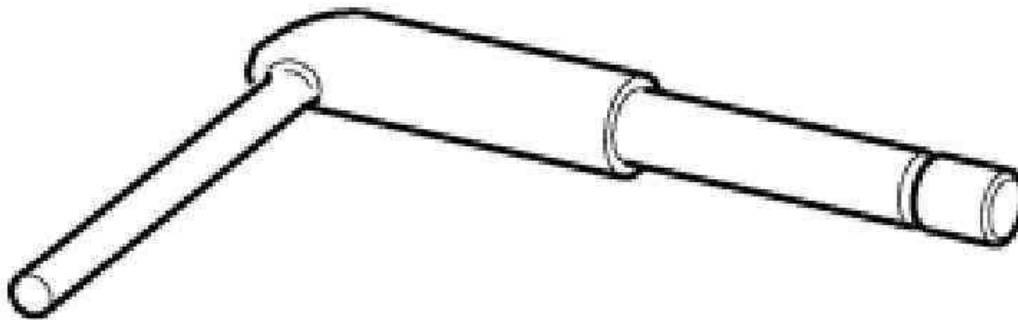
2005 BMW Z4

2003-05 ENGINE Engine - Special Tools - Z4 (E85)

Storage location: C39

SI number: 1 15 99 (483)

Order number: 11 5 180 Plug mandrel, angled



G03296934

Fig. 31: Identifying 11 5 180 Plug Mandrel (Angled)
Courtesy of BMW OF NORTH AMERICA, INC.

11 6 150 ADJUSTING PLATE

Minimum set: Mechanical tools

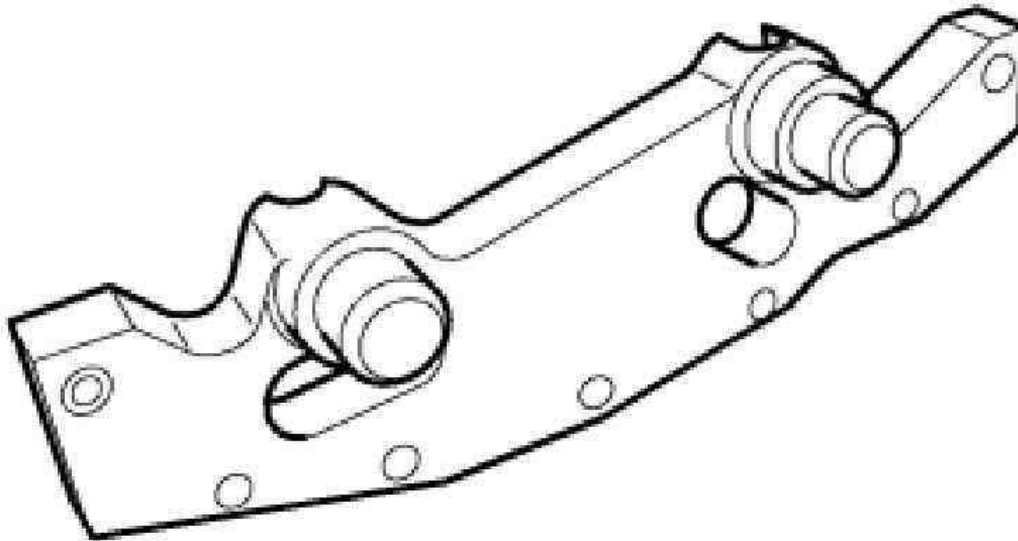
Note: For adjusting valve timing on engines with twin VANOS

Engine: M52TU, M54, M56

Storage location: B36, B37

SI number: 1 05 98(305)

Order number: 11 6 150 Adjusting plate



G03296935

Fig. 32: Identifying 11 6 150 Adjusting Plate
Courtesy of BMW OF NORTH AMERICA, INC.

11 6 170 PLIERS FOR TWIN VANOS

Minimum set: Mechanical tools

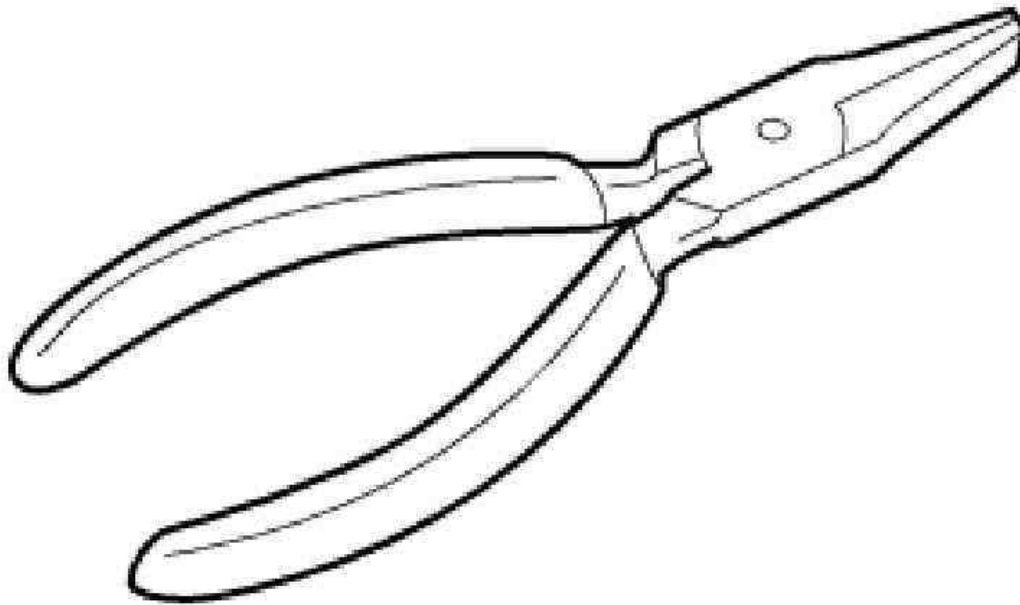
Note: For removing and installing plastic sealing caps on twin VANOS.

Engine: M52TU, M54, M56

Storage location: A36

SI number: 1 05 98(305)

Order number: 11 6 170 Pliers for twin VANOS



G03296936

Fig. 33: Identifying 11 6 170 Pliers For Twin VANOS
Courtesy of BMW OF NORTH AMERICA, INC.

11 6 180 FIXTURE

Minimum set: Mechanical tools

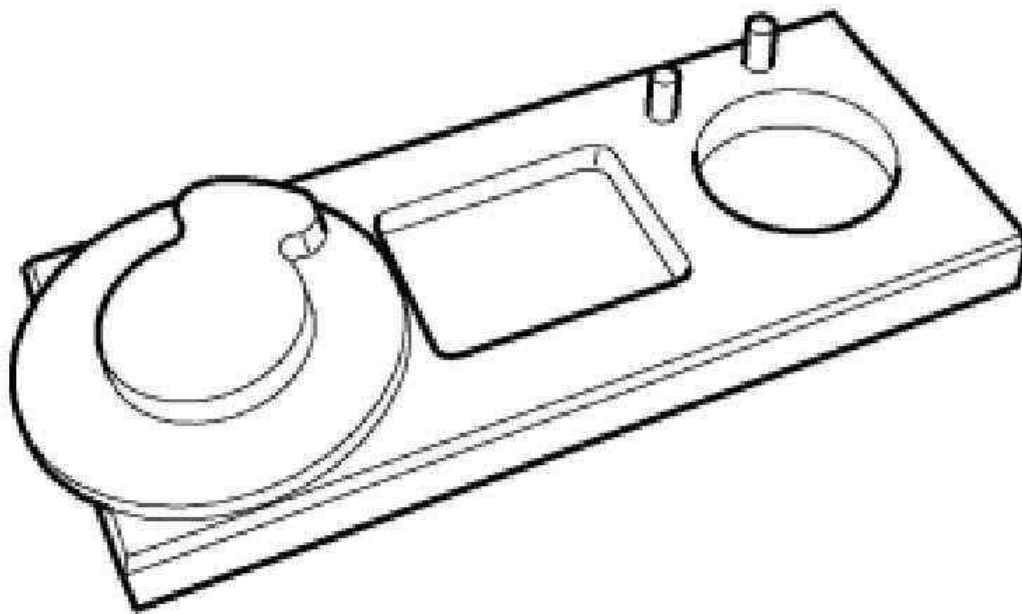
Note: For preassembling secondary chain wheels with chain on camshafts

Engine: M52TU, M54, M56

Storage location: B37

SI number: 1 05 98(305)

Order number: 11 6 180 Fixture



G03296937

Fig. 34: Identifying 11 6 180 Fixture
Courtesy of BMW OF NORTH AMERICA, INC.

11 6 420 SOCKET WRENCH WAF32

Minimum set: Mechanical tools

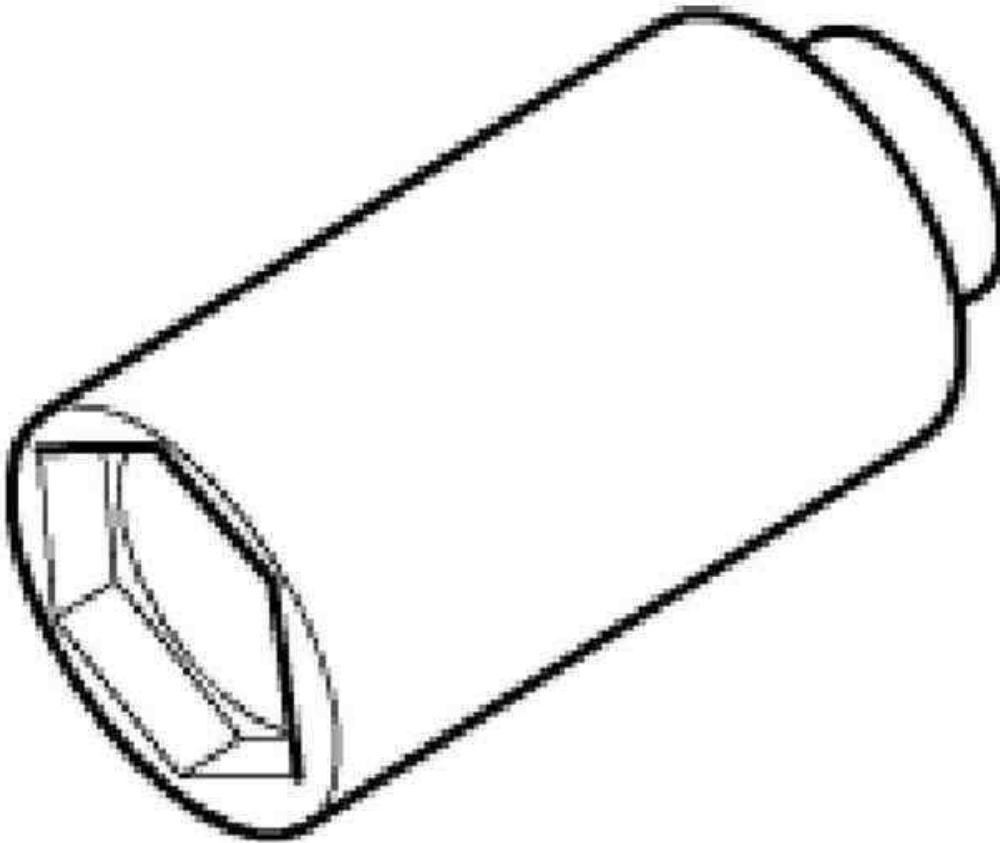
Note: For removing and installing solenoid valves

Engine: M54, M62VAN

Storage location: A38

SI number: 1 12 98(339)

Order number: 11 6 420 Socket wrench WAF32



G03296938

Fig. 35: Identifying 11 6 420 Socket Wrench WAF32
Courtesy of BMW OF NORTH AMERICA, INC.

11 7 020 SOCKET WRENCH SOCKET WAF 22

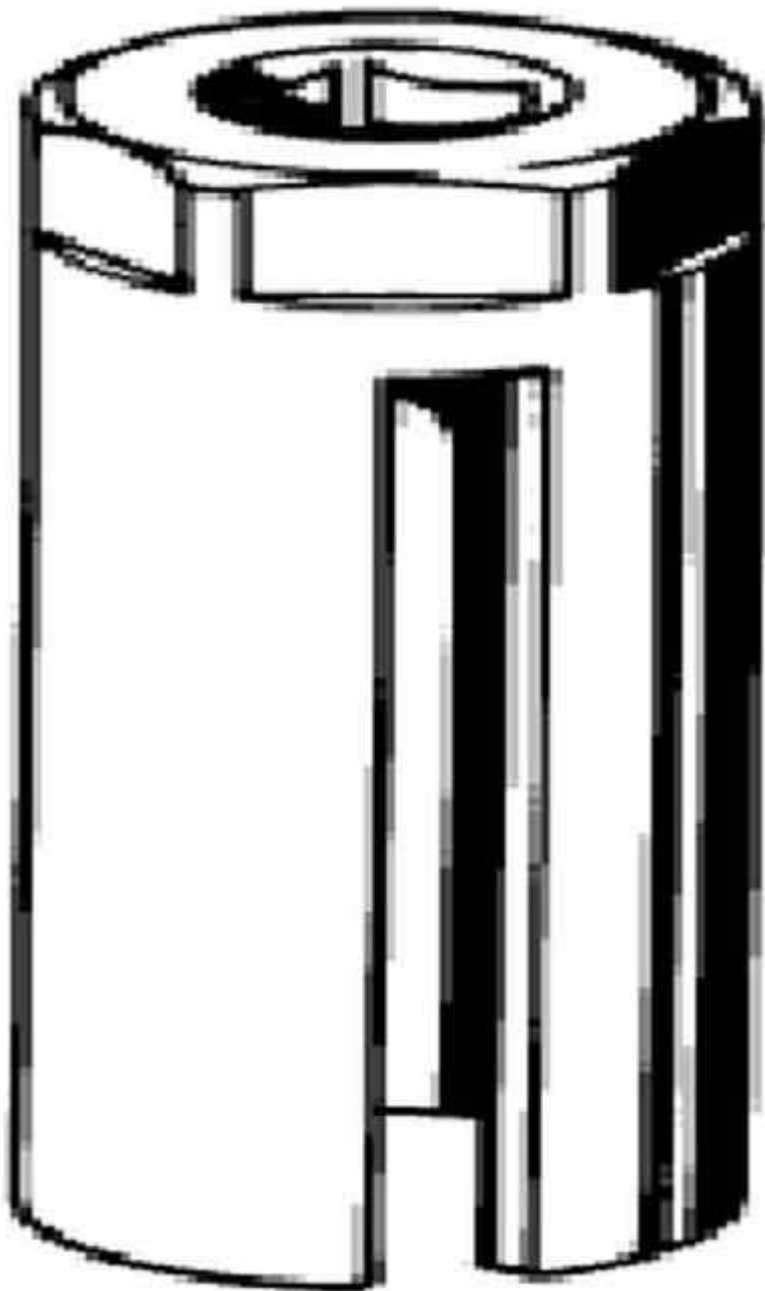
Minimum set: Mechanical tools

Note: For loosening and tightening oxygen sensor

Engine: M10, M20, M30, M40, M42, M50, M52TU, M54, M56, M57, M60, M70, M73, N42, N45, N46, S14, S38, S50B30, S50B32, S50US, S52US, S54

Storage location: C13

Order number: 11 7 020 Socket wrench socket WAF 22



G03296939

Fig. 36: Identifying 11 7 020 Socket Wrench Socket WAF 22
Courtesy of BMW OF NORTH AMERICA, INC.

11 7 030 SOCKET WRENCH SOCKET WAF 22

Minimum set: Mechanical tools

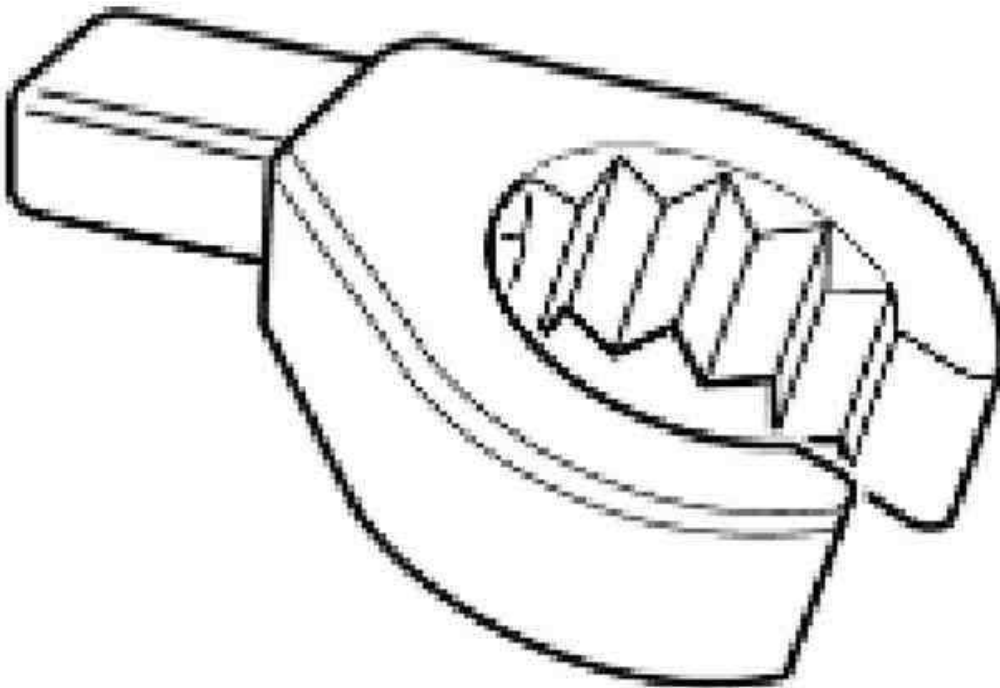
Note: For loosening and tightening oxygen sensor

Engine: M40, M43, M43TU, M44, M52, M52TU, M54, M56, M62, N40, N42, N45, N46, N62, N62TU, N73, S54, S62

Storage location: B15

SI number: 1 06 95(963)

Order number: 11 7 030 Socket wrench socket WAF 22



G03296940

Fig. 37: Identifying 11 7 030 Socket Wrench Socket WAF 22
Courtesy of BMW OF NORTH AMERICA, INC.

11 7 390 COMPLETE PRESSURE TESTING FIXTURE

Note: For closing off coolant outlet openings when pressure-testing cylinder head for water leaks

2005 BMW Z4

2003-05 ENGINE Engine - Special Tools - Z4 (E85)

Engine: M52TU, M54, M56

Order number: 11 7 390 Complete pressure testing fixture

Consisting of:

1 = 11 7 391 Sealing strip with 7 lugs

2 = 11 7 392 Sealing strip with 5 lugs

3 = 11 7 393 Cover plate

Note: For cylinder head sealing face

4 = 11 7 394 Support bracket

Note: With pressure spindle and mounting screw for 11 7 393

5 = 11 7 395 Screw plug

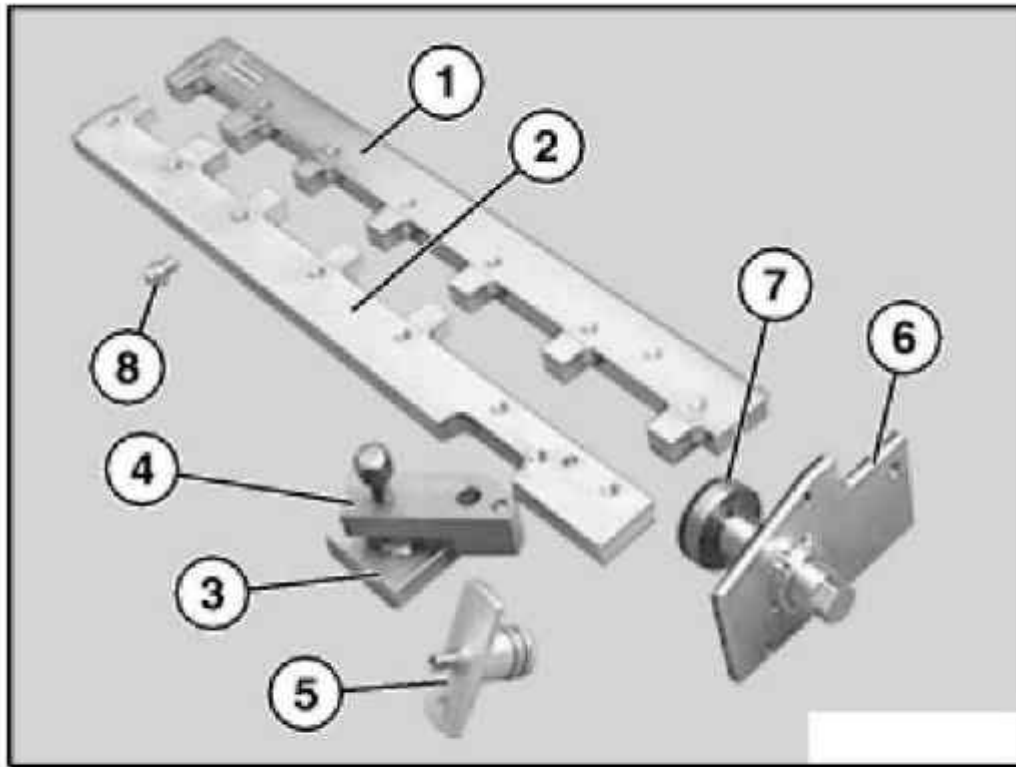
Note: With air connection

6 = 11 7 396 Cover plate, end face

7 = 11 7 397 Spindle

Note: With thrust piece for 11 7 396

8 = 11 7 398 Screw plug, intake side



1 = 11 7 391

Sealing strip with 7 lugs

2 = 11 7 392

Sealing strip with 5 lugs

3 = 11 7 393

Cover plate

4 = 11 7 394

Support bracket

5 = 11 7 395

Screw plug

6 = 11 7 396

Cover plate, end face

7 = 11 7 397

Spindle

8 = 11 7 398

Screw plug, intake side

Fig. 38: Identifying 11 7 390 Complete Pressure Testing Fixture
Courtesy of BMW OF NORTH AMERICA, INC.

11 8 020 ENGINE SECURING FIXTURE

Minimum set: Mechanical tools

Note: For securing engine in position during removal and installation of transmission

Series: E36, E46, E85

Engine: M51, M52, M52TU, M54, M57TU, S50B30, S50B32

SI number: 1 12 92 (606)

Order number: 11 8 020 Engine securing fixture

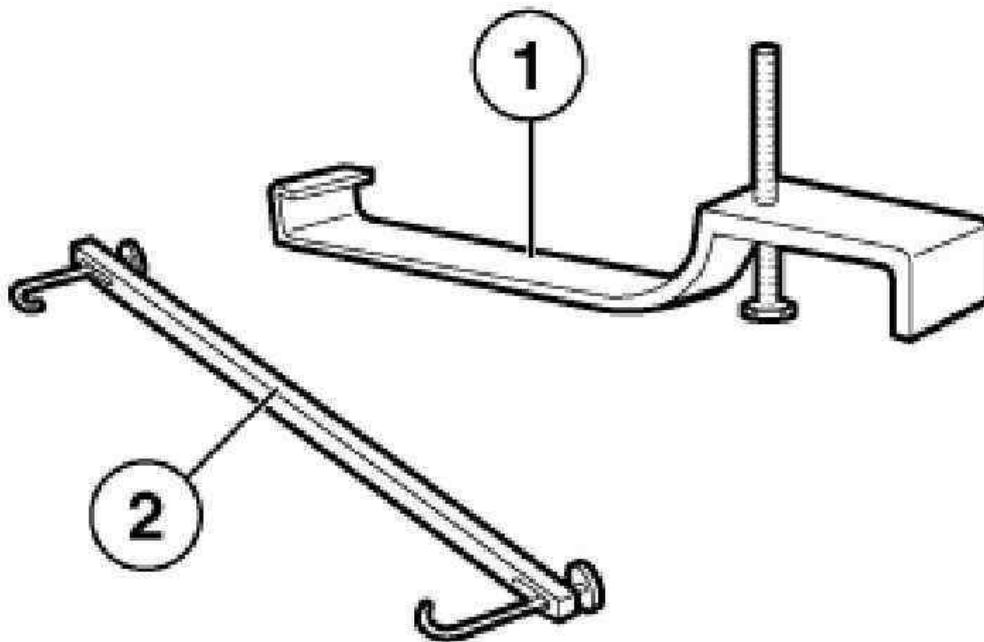
Consisting of:

1 = 11 8 021 Engine fixture, front

Note: Engine: S50/B30

2 = 11 8 022 Engine fixture, rear

Note: E36/M51/M52, E46/M52TU/M54, E85/M54, E46/M57TU



1 = 11 8 021 Engine fixture, front

2 = 11 8 022 Engine fixture, rear

G03296942

Fig. 39: Identifying 11 8 020 Engine Securing Fixture
Courtesy of BMW OF NORTH AMERICA, INC.

11 8 040 ENGINE SUPPORT PLATE

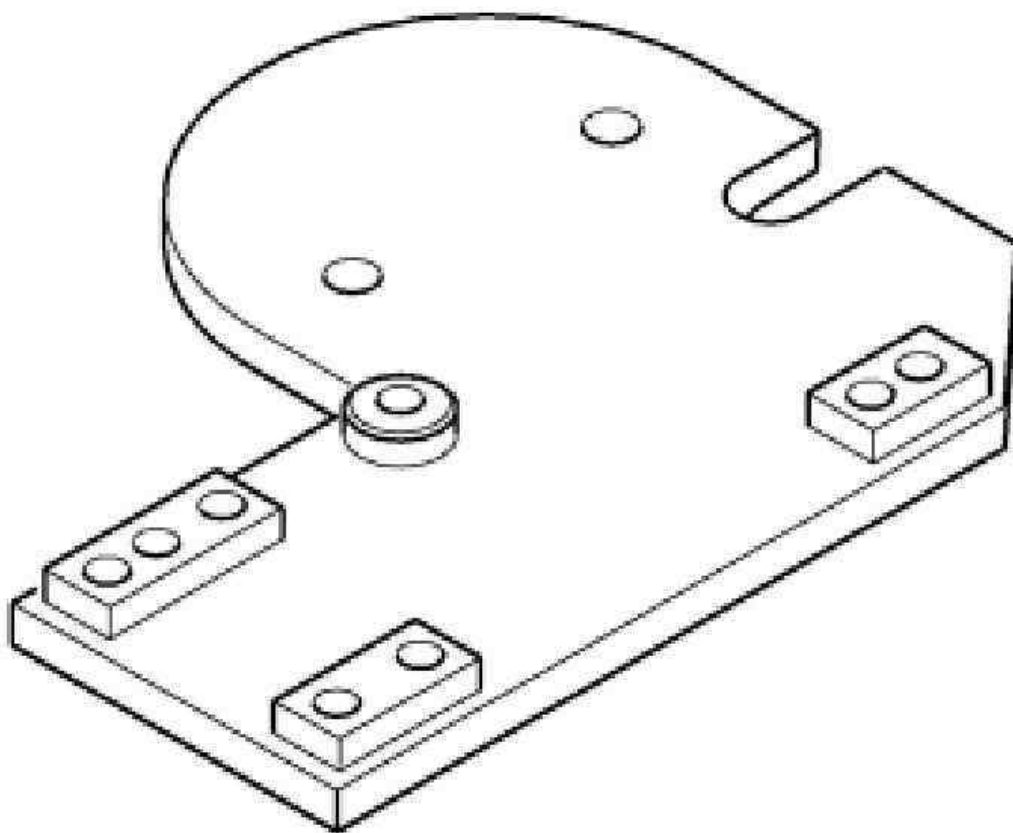
In conjunction with: 00 1 450

Note: For securing engine on assembly stand

Engine: M41, M47, M47TU, M50, M51, M52, M52TU, M54, M56, M57, M57TU, S50B30, S50B32, S54

SI number: 1 09 94(839)

Order number: 11 8 040 Engine support plate



G03296943

Fig. 40: Identifying 11 8 040 Engine Support Plate
Courtesy of BMW OF NORTH AMERICA, INC.

11 8 140 ASSEMBLY SLEEVES

Minimum set: Mechanical tools

Note: For installing pistons

Engine: M52, M52TU, M54, M56, M67, N40, N42, N45, N46, N62, S52US

SI number: 1 12 99(452)

Order number: 11 8 140 Assembly sleeves

Consisting of:

2005 BMW Z4

2003-05 ENGINE Engine - Special Tools - Z4 (E85)

1 = 11 8 141 Bushing

Note: Bushing for piston mounting 84.00mm

2 = 11 8 142 Bushing

Note: Bushing for piston mounting 84.08 mm

3 = 11 8 143 Bushing

Note: Bushing for piston mounting 84.25 mm



G03296944

Fig. 41: Identifying 11 8 140 Assembly Sleeves
Courtesy of BMW OF NORTH AMERICA, INC.

11 8 190 BRACE (PART 1)

Minimum set: Mechanical tools

2005 BMW Z4

2003-05 ENGINE Engine - Special Tools - Z4 (E85)

In conjunction with: 11 8 200

Note: For gripping vibration damper

Engine: M52TU, M54, M56

SI number: 1 08 00(579)

Order number: 11 8 190 Brace (part 1)



G03296945

Fig. 42: Identifying 11 8 190 Brace (Part 1)
Courtesy of BMW OF NORTH AMERICA, INC.

11 8 200 BRACE (PART 2)

Minimum set: Mechanical tools

In conjunction with: 11 8 190 and 11 8 210

2005 BMW Z4

2003-05 ENGINE Engine - Special Tools - Z4 (E85)

Note: For gripping and pulling on vibration damper

Engine: M52TU, M54, M56, W10, W11

Storage location: C41

SI number: 1 08 00(579)

Order number: 11 8 200 Brace (part 2)



G03296946

Fig. 43: Identifying 11 8 200 Brace (Part 2)
Courtesy of BMW OF NORTH AMERICA, INC.

11 8 210 PULLER

Minimum set: Mechanical tools

In conjunction with: 11 8 200

2005 BMW Z4

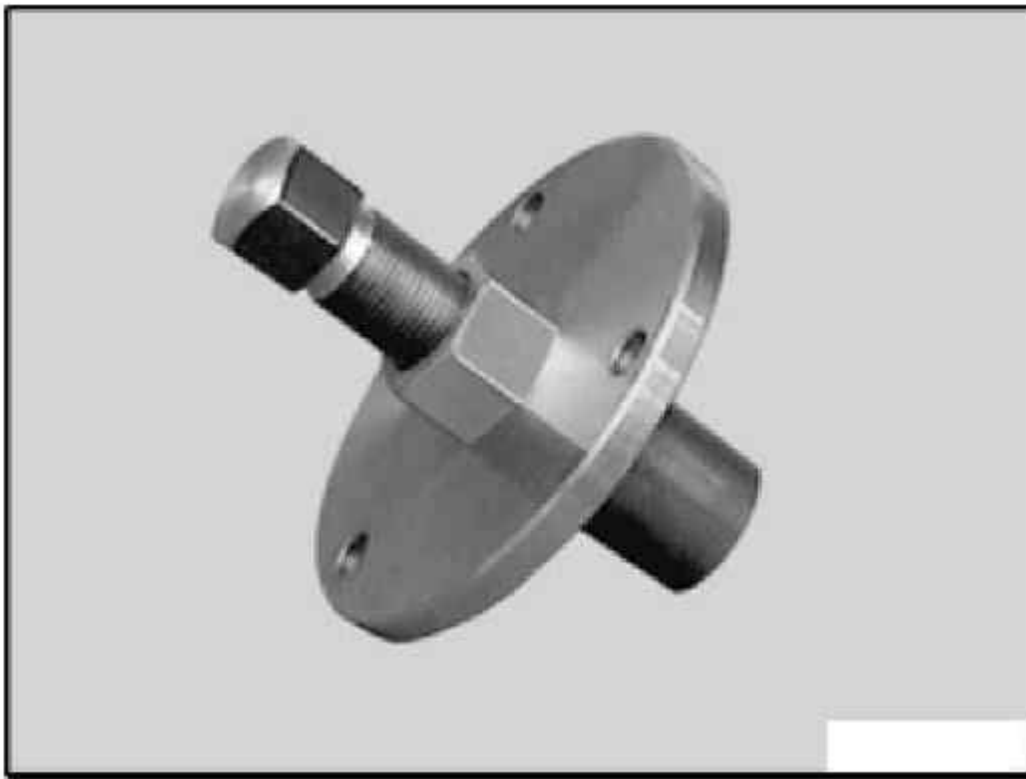
2003-05 ENGINE Engine - Special Tools - Z4 (E85)

Note: For detaching vibration damper

Engine: M52TU, M54, M56

SI number: 1 08 00(579)

Order number: 11 8 210 Puller



G03296947

Fig. 44: Identifying 11 8 210 Puller

Courtesy of BMW OF NORTH AMERICA, INC.

11 9 000 CYLINDER HEAD EXPANDER TOOL

Minimum set: Mechanical tools

In conjunction with: Assembly stand 00 1 450

Engine: M10, M20, M20B25, M20B27, M21, M30, M30B34, M30Tur, M40, M41, M42, M43, M43TU, M44,

2005 BMW Z4

2003-05 ENGINE Engine - Special Tools - Z4 (E85)

M47, M47TU, M50, M51, M52, M52TU, M54, M56, M57, M57D25, M57D30, M57TU, M60, M62, M62VAN, M67, M70, M73, M88, N40, N42, N45, N46, N52, N62, N73, S14, S38, S50B30, S50B32, S50US, S52US, S54, S62, S85, W10, W11, W17

Storage location: Single

SI number: 1 03 02 (833)

Order number: 11 9 000 Cylinder head expander tool

Consisting of:

1 = 11 9 001 Fixture

2 = 11 9 002 Rod

3 = 11 9 003 Sliding block with M10 thread

4 = 11 9 004 Tab

5 = 11 9 005 Quick tensioner

6 = 11 9 006 Aluminum profile insert

7 = 11 9 007 Slide

8 = 11 9 008 Profile plastic part

9 = 11 9 009 Lever

10 = 11 9 011 Hook

11 = 11 9 012 Valve spring cage

Note: Engine M41, M51, S50

12 = 11 9 013 Valve spring cage

Note: Engine M43, M73

13 = 11 9 014 Valve spring cage

Note: Engine M44, M52, M54, M56, M62, S52, S54, S62

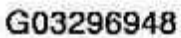
14 = 11 9 015 Valve spring cage

Note: Engine M47 M47TU M57 M57TU N40 N42 N62 N73

2005 BMW Z4
2003-05 ENGINE Engine - Special Tools - Z4 (E85)

2005 BMW Z4
2003-05 ENGINE Engine - Special Tools - Z4 (E85)

Note: Engine N52



Minimum set: Mechanical tools

2005 BMW Z4

2003-05 ENGINE Engine - Special Tools - Z4 (E85)

In conjunction with: 11 7 030

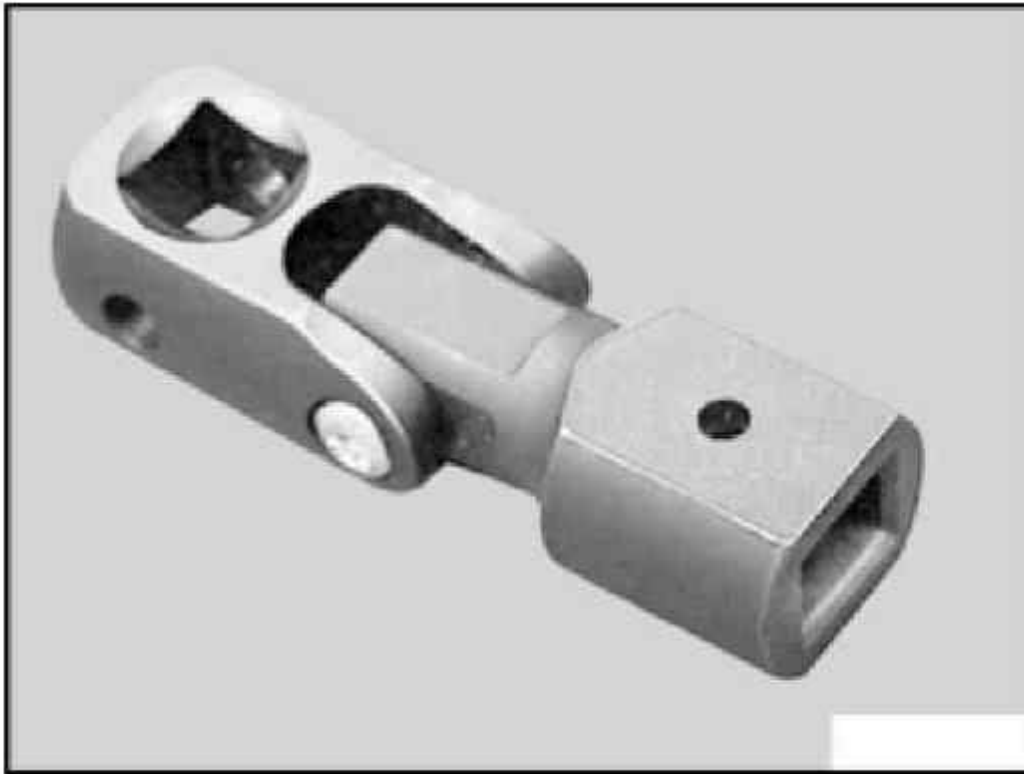
Note: For releasing and tightening down oxygen sensors

Engine: M54, M56, N42, N45, N46, N62, N62TU, N73, S54

Storage location: A42

SI number: 01 15 00 (609)

Order number: 11 9 150 Special wrench



G03296949

Fig. 46: Identifying 11 9 150 Special Wrench
Courtesy of BMW OF NORTH AMERICA, INC.

11 9 260 COUNTER SUPPORT WITH SCREW CONNECTION

Minimum set: Mechanical tools

2005 BMW Z4

2003-05 ENGINE Engine - Special Tools - Z4 (E85)

Note: For locking flywheel with transmission removed

Engine: M47TU, M54, M57T2, M57TU, N40, N42, N45, N46, N52, N62, N73, S85, W17

Storage location: A45, B43, C44

SI number: 1 01 01 (662)

Order number: 11 9 260 Counter support with screw connection

Consisting of:

1 = 11 9 261 Counterholder, individual

2 = 11 9 262 Bolt (M10 thread) with washer

Note: For bolting down counterholder

3 = 11 9 263 Sleeve for counterholder

Note: For counterholder for locking flywheel with transmission removed engine: N62, N73

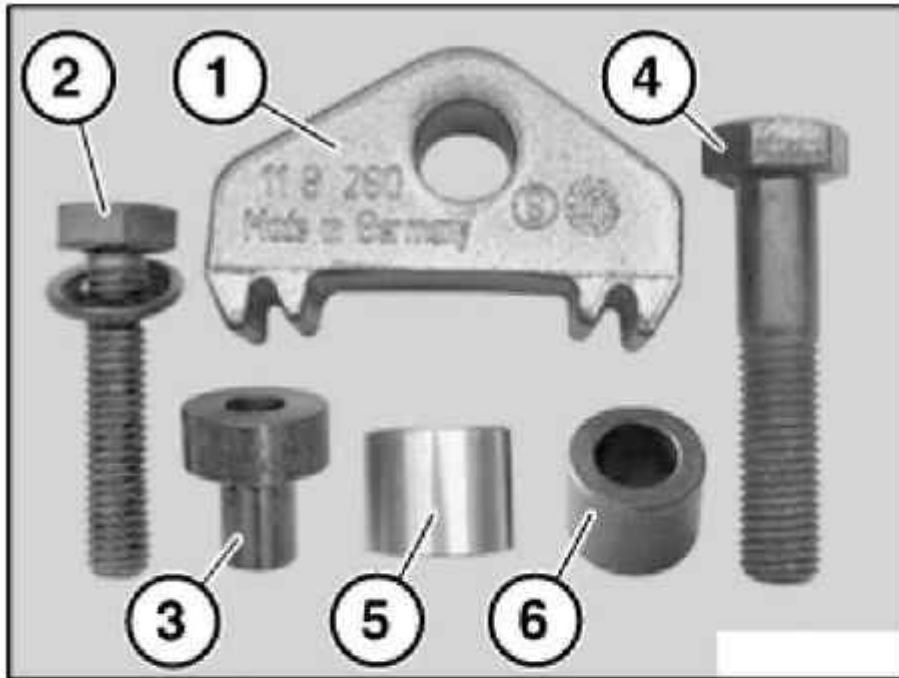
4 = 11 9 264 Bolt (M12 thread)

Note: For counterholder for locking flywheel with transmission removed

5 = 11 9 265 Sleeve

6 = 11 9 266 Sleeve

Note: For counterholder for locking flywheel with transmission removed Engine: M57TU2



- | | |
|--------------|-------------------------------|
| 1 = 11 9 261 | Counterholder, individual |
| 2 = 11 9 262 | Bolt (M10 thread) with washer |
| 3 = 11 9 263 | Sleeve for counterholder |
| 4 = 11 9 264 | Bolt (M12 thread) |
| 5 = 11 9 265 | Sleeve |
| 6 = 11 9 266 | Sleeve |

G03296950

Fig. 47: Identifying 11 9 260 Counter Support With Screw Connection
Courtesy of BMW OF NORTH AMERICA, INC.