

ELECTRICAL

Engine Electrical System - Special Tools - X6

12 1 170 SPARK PLUG TOOL

Minimum set: Mechanical tools

In conjunction with: 12 1 200

NOTE: For releasing spark | tightening to torque |

Engine: M40, M42, M43, M43 M52, M60, M62, M70 N40, N42, N45, N46 S38, S50B30, S50B3

Storage location: B13

Order number: 12 1 170

Spark plug tool

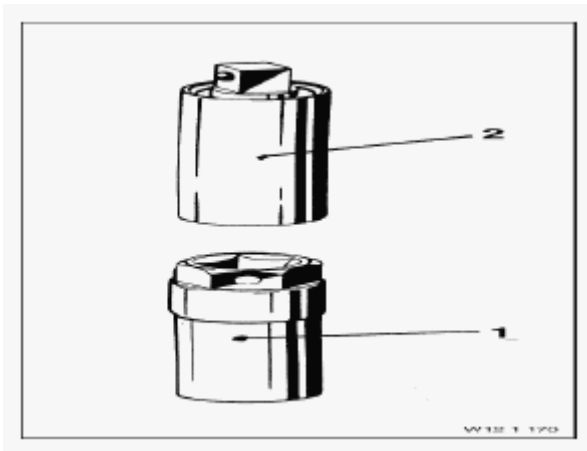


Fig. 1: Identify Special Tool (12 1 170)

Courtesy of BMW OF NORTH AMERICA, INC.

Consisting of:

1 = 12 1 171 Spark plug key WAF

NOTE: S50, M40, M42 M52, M60, M62, M70 N40, N42, N73

In conjunction with: 12 1 200 (M40, M42 M52, M60, M62, M70 N73)

2 = 12 1 172 Torque limiter 23 Nm

NOTE: **S14, S38, S50**

In conjunction with: 12 1 160 (S14, S38)

12 1 220 SPARK PLUG WRENCH WAF 14 MM BIHEXAL

Minimum set: Mechanical tools

NOTE: **Engine N45/320si" N54" N12" N14**

Engine: N12, N14, N45, N54

SI number: 1 04 06 (246)

Order number: 12 1 220

Spark plug wrench WAF 14 mm bihexal



Fig. 2: Identify Special Tool (12 1 220)
Courtesy of BMW OF NORTH AMERICA, INC.

12 1 230 INSTALLATION AID

NOTE: **Aid for installing spark plugs: N43, N53 and N54 engines. Original BERU ZMH 001 rubber hose 0 890 00 001.**

Engine: N43, N53, N54

SI number: 1 04 07 (352)

Order number: 12 1 230

Installation aid

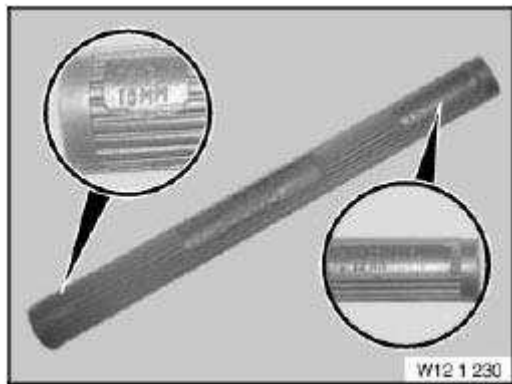


Fig. 3: Identify Special Tool (12 1 230)
 Courtesy of BMW OF NORTH AMERICA, INC.

12 1 300 ADAPTER SET FOR 134-PIN MODULE PLUG

Minimum set: Measuring and testing equipment

In conjunction with: 61 1 459

NOTE: For diagnosis and troubleshooting on DME and transmission control - from model year 98

Engine: M54, M56, M62, M73, N40, N42, N43, N45, N45T, N46, N46T, N51, N52, N53, N54, N62, N73

Storage location: N 201, N 202, N 203, N 204

SI number: 2 04 97 (248)

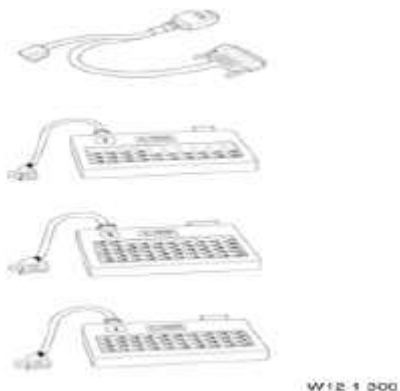


Fig. 4: Identify Special Tool (12 1 300)
 Courtesy of BMW OF NORTH AMERICA, INC.

Order number: 12 1 300

Adapter set for 134-pin module plug

Consisting of:

12 1 301 Adapter lead 9-pin

12 1 302 Measurement module 24-pin

12 1 303 Measurement module 40-pin

12 1 304 Measurement module 52-pin

NOTE: Supplied from 08/2004 in conjunction with 12 1 305 (zero-coded cover cap for new SGM control unit in E6x)

12 1 305 ZERO-CODED COVER CAP FOR 52-PIN TEST BOX (12 1300/304)

NOTE: New plugs in E61/E61/E63 and E64 on SGM control unit Cover cap 12 1 300/305 for diagnosis on wiring harness. From 08/2004 cover cap will be supplied with test box.

SI number: 2 07 04 (138)

Order number: 12 1 305

Zero-coded cover cap for 52-pin test box (12 1300/304)

12 7 121 COUNTERHOLDER WRENCH

In conjunction with: Socket

NOTE: Alternator N42 engine

Order number: 12 7 121

Counterholder wrench

12 7 122 SOCKET

In conjunction with: Counterholder wrench

NOTE: Hazet 8808 Ig10

SI number: 1 28 03 (051)

Order number: 12 7 122

Socket

12 7 190 EPROM TOOLS / ID MARKING

NOTE: Set no longer available. Antistatic mat can be ordered using number 12 7 060. SEE .

Storage location: J 101

Order number: 12 7 190

Eprom tools / ID marking

Consisting of:

1 = 12 7 191 Eprom puller pliers

NOTE: No longer available. Antistatic mat can be ordered using special tool number 12 7 060 (see).

2 = 12 7 192 Antistatic mat

NOTE: Is replaced by main number 12 7 060, see

12 7 200 SET OF TOOLS

NOTE: For opening & closing control unit box

Storage location: J 106

Order number: 12 7 200

Set of tools

Consisting of:

1 = 12 7 201 Pliers

NOTE: For bending open tab washers

2 = 12 7 202 Lever

NOTE: For bending tab washers

3 = 12 7 203 Pliers

NOTE: For closing tab washers

4 = 12 7 204 Torx socket T20

5 = 12 7 205 Torx socket T10

6 = 12 7 206 Fine pen

NOTE: Black, waterproof

8 = 12 7 208 Slotted screwdriver 2 mm

9 = 12 7 209 Straightening tool

NOTE: For Eprom connections

12 7 210 CONTROL UNIT SEAL

Storage location: J 106

Order number: 12 7 210

Control unit seal

Consisting of:

1 = 12 7 211 Seal marks

2 = 12 7 212 Hole punch

NOTE: For seal mark dating