

ACCESSORIES & BODY, CAB

Central Locking System - 172 Chassis

GENERAL INFORMATION

CENTRAL LOCKING, CONVENIENCE FEATURE, DRIVE AUTHORIZATION SYSTEM - AH80.00-Z-9999AZ

MODEL ALL

Â	General notes for retrofitting extended anti-theft alarm (EATA)	MODEL 124, 129, 140, 168, 170, 202, 210	AH80.50-P-0001-01A
Â	Notes on sensor system for trunk lid opening/closing	MODEL 190, 205, 212, 217, 222, 231...	AH80.61-P-0001-01A

BASIC KNOWLEDGE

TABLE OF CONTENTS FOR FUNCTION DESCRIPTION OF THEFT PROTECTION AND LOCKING - GF80.00-P-0999RD

MODEL 172.4

Â	Function description for theft protection and locking	Â	GF80.00-P-0001RD
Â	Central locking (CL [ZV]), function	Â	GF80.20-P-0005RD
Â	Keyless Go, function	With CODE (889) Keyless Go	GF80.61-P-0005RD
Â	Drive authorization system level 3 (DAS [FBS] 3), function	Â	GF80.57-P-0003RD
Â	Convenience feature (CF), function	Â	GF80.45-P-0003RD
Â	Anti-theft alarm system (ATA [EDW]), function	With code (551) Antitheft alarm system (ATA [EDW])	GF80.50-P-0001RD
Â	Overview of system components for theft protection and locking	Â	<u>GF80.00-P-9999RD</u>

OVERVIEW OF SYSTEM COMPONENTS FOR THEFT PROTECTION AND LOCKING - GF80.00-P-9999RD

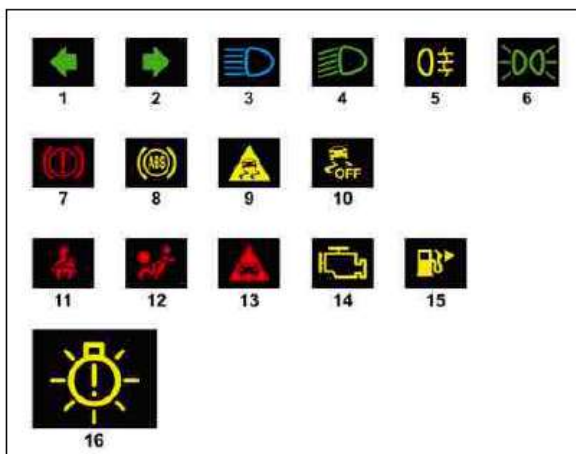
MODEL 172.4

		In the event of complaints: ↓ Determine and rectify cause, subject to separate repair order	
7	Switch on rear fog lamp	 The rear fog light indicator lamp (5) must light up and there must not be a lamp failure message in the multifunction display (16). In the event of complaints: ↓ Determine and rectify cause, subject to separate repair order	Â
8	Engage reverse gear and apply service brake	 No lamp failure message in the multifunction display (16).	Â
9	Switch off ignition and exterior lights	Â	Â
10	Switch on hazard warning flashers	 The left and right turn signal light indicator lamps (1, 2) flash in unison. In the event of complaints: ↓ Determine and rectify cause, subject to separate repair order	Â
11	Switch off hazard warning flashers	Â	Â

Check warning and function indicator lamps in instrument cluster - AP54.30-P-5451EL

MODEL 218

- 1 Left turn signal indicator light
- 2 Right turn signal indicator light
- 3 High beam indicator lamp
- 4 Low beam indicator lamp
- 5 Rear fog lamp indicator lamp
- 6 Standing lamps indicator lamp
- 7 Brake fluid and parking brake warning lamp
- 8 Antilock brake system indicator lamp
- 9 Electronic Stability Program warning lamp (ESP)
- 10 ESP®/ASR OFF warning lamp
- 11 Seat belt warning lamp
- 12 Supplemental restraint system indicator lamp
- 13 DISTRONIC warning lamp (with code (233) DISTRONIC PLUS)
- 14 Engine diagnosis indicator lamp
- 15 Fuel reserve indicator lamp
- 16 Multifunction display



P54.33-2484-81

Fig. 7: Identifying Warning And Function Indicator Lamps (Model 218)

Courtesy of MERCEDES-BENZ USA

	Check	Â	Â
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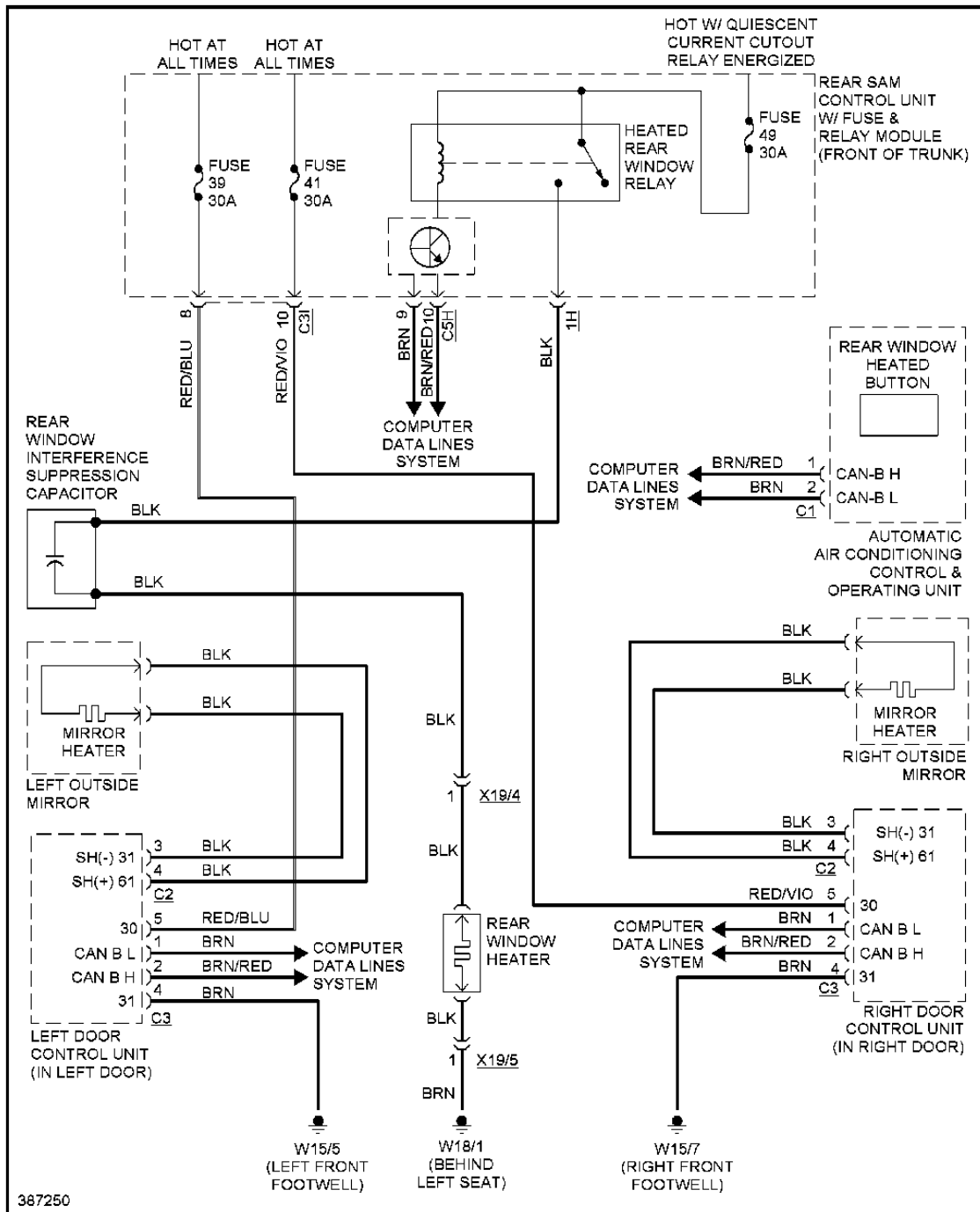
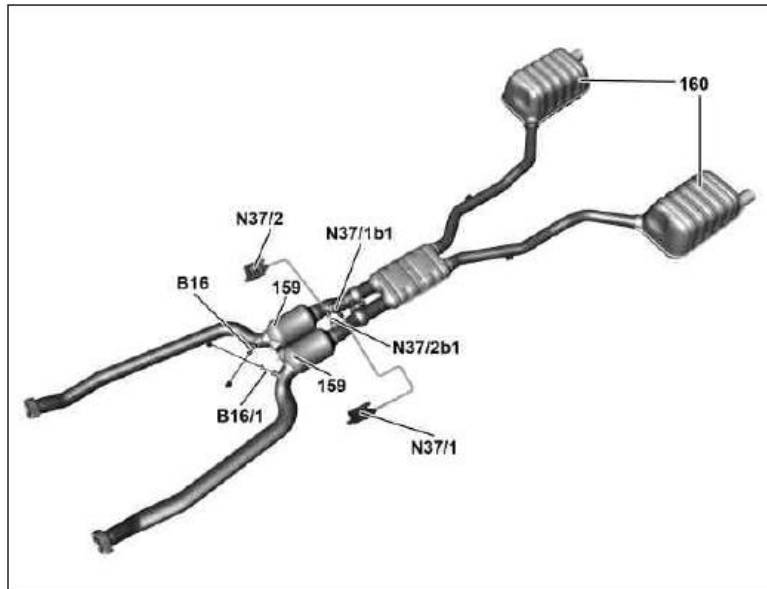


Fig. 18: Defoggers Circuit

ELECTRONIC POWER STEERING

- 159 NOx storage catalytic converter
- 160 Rear muffler
- B16 Temperature sensor upstream of NOx storage catalytic converter, right
- B16/1 Temperature sensor upstream of NOx storage catalytic converter, left
- N37/1 Left NOx sensor control unit
- N37/1b1 Left NOx sensor
- N37/2 Right NOx sensor control unit
- N37/2b1 Right NOx sensor



P49.10-2912-06

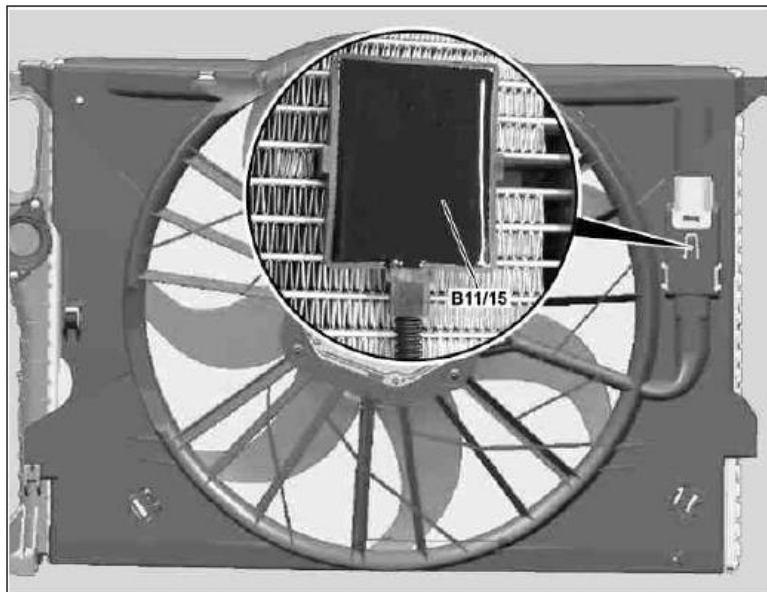
Fig. 24: Identifying Exhaust System For Engine With Stratified Operation

Courtesy of MERCEDES-BENZ USA

i The LH NOx sensor is located on the right exhaust pipe and the RH NOx sensor is located on the left exhaust pipe.

View on cooler from rear (on engine 276 without stratified operation, engine 278 with code (494) USA version and code (917) Partial zero emission vehicle USA)

- B11/15 Radiator sensor for engine diagnosis



P07.04-2702-06

Fig. 25: Identifying Cooler Rear View

Courtesy of MERCEDES-BENZ USA

Phantom view of fuel tank



Fig. 12: Identifying Electrical Connection Kit (220 589 00 99 00)
Courtesy of MERCEDES-BENZ USA



Fig. 13: Identifying Compression Tester (001 589 76 21 00)
Courtesy of MERCEDES-BENZ USA

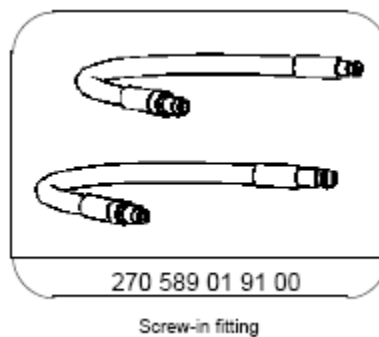
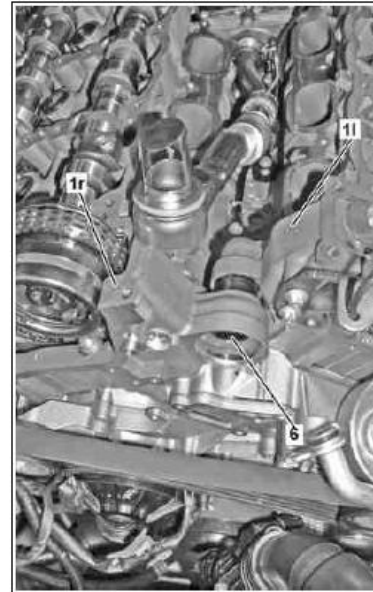


Fig. 14: Identifying Screw-In Fitting (270 589 01 91 00)
Courtesy of MERCEDES-BENZ USA

Test compression pressure - AR01.00-P-1200W

ENGINE 276 in MODEL 172

- 1l Cylinder head
- 6 Coolant pipe

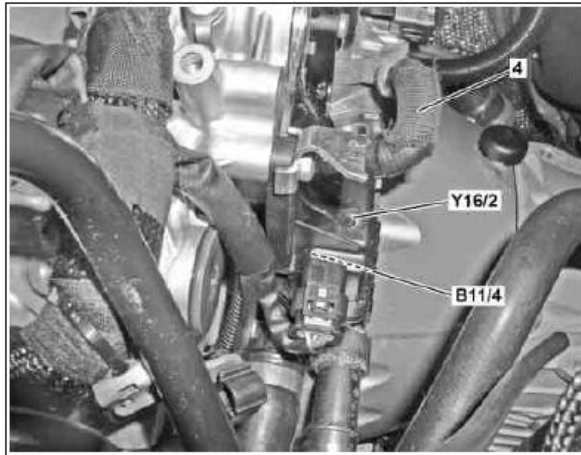


P01.30-2383-03

Fig. 106: Identifying Left Cylinder Head Remove/Install Components (2 Of 4)

Courtesy of MERCEDES-BENZ USA

- 4 Coolant hose
- B11/4 Coolant temperature sensor
- Y16/2 Heating system shutoff valve



P01.30-2386-11

Fig. 107: Identifying Left Cylinder Head Remove/Install Components (3 Of 4)

Courtesy of MERCEDES-BENZ USA



Fig. 109: Identifying Application Gun (112 589 00 25 00)

Courtesy of MERCEDES-BENZ USA

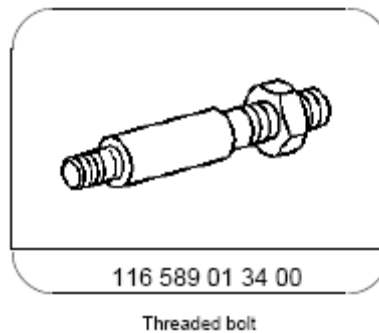


Fig. 110: Identifying Threaded Bolt (116 589 01 34 00)

Courtesy of MERCEDES-BENZ USA

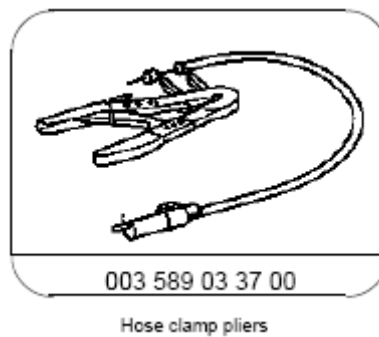


Fig. 111: Identifying Hose Clamp Pliers (003 589 03 37 00)

Courtesy of MERCEDES-BENZ USA

Number	Designation	Engine 271
BA15.30-P-1003-01A	Bolt, starter to cylinder crankcase	Nm 40

STARTER

Number	Designation	Engine 271
BA15.30-P-1001-01A	Nut, connection for circuit 30	Nm 14

STARTER

Number	Designation	Engine 271
BA15.30-P-1002-01A	Nut, connection for circuit 50	Nm 6

OIL PAN

Number	Designation	ENGINE 271
BA01.45-P-1005-01H	Bolt, bracket of O2 sensor connector upstream of catalytic converter to oil pan	M6 Nm 11

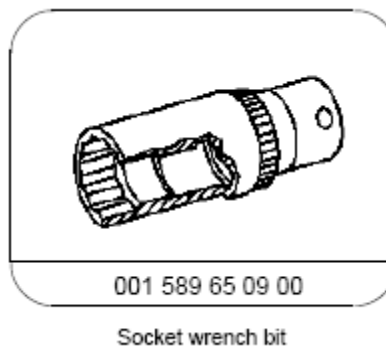


Fig. 16: Identifying Socket Wrench Bit (001 589 65 09 00)

Courtesy of MERCEDES-BENZ USA

Remove/install starter - AR15.30-P-7100MR

ENGINE 274 in MODEL 172

ENGINE 274 in MODEL 204

ENGINE 274 in MODEL 207

ENGINE 274 in MODEL 218

ENGINE 274.9 in MODEL 212 except code 924 (Bivalent natural gas drive)

Shown on model 212.002



2 Filter element
3 Sealing rings

Courtesy of MERCEDES-BENZ USA

8 of 106

Number	Designation	Engine 271 (shortened maintenance interval)	Engine 271 (maximum maintenance interval)
	Specification	Low SPASh multigrade service engine oils (specification 229.51). See https://bevo.mercedes-benz.com/index.php?language_id=1	-

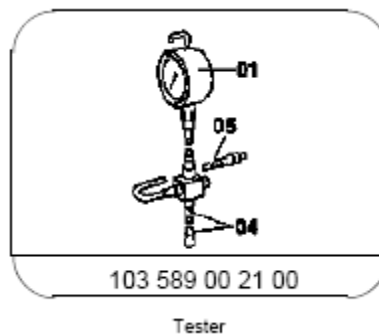


Fig. 2: Identifying Tester (103 589 00 21 00)

Courtesy of MERCEDES-BENZ USA

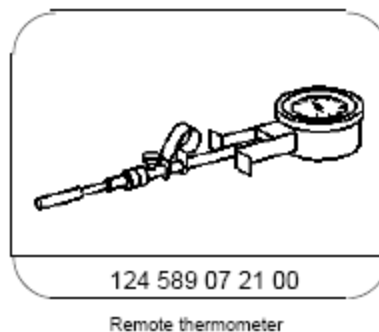


Fig. 3: Identifying Remote Thermometer (124 589 07 21 00)

Courtesy of MERCEDES-BENZ USA



Fig. 4: Identifying Tester Cap (271 589 03 63 00)

Courtesy of MERCEDES-BENZ USA

Number	Designation		Engine 157 in model 166, 212, 216, 217, 218, 221, 222, 231, 292 Engine 157 in model 463
P-1001-01V	oil	(oil and filter change)	
		Specification	Multigrade engine oils (specification 229.5). See https://bevo.mercedes-benz.com/index.php?language_id=1
		Specification	-
		Specification	-

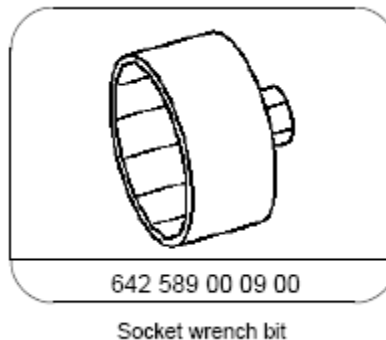
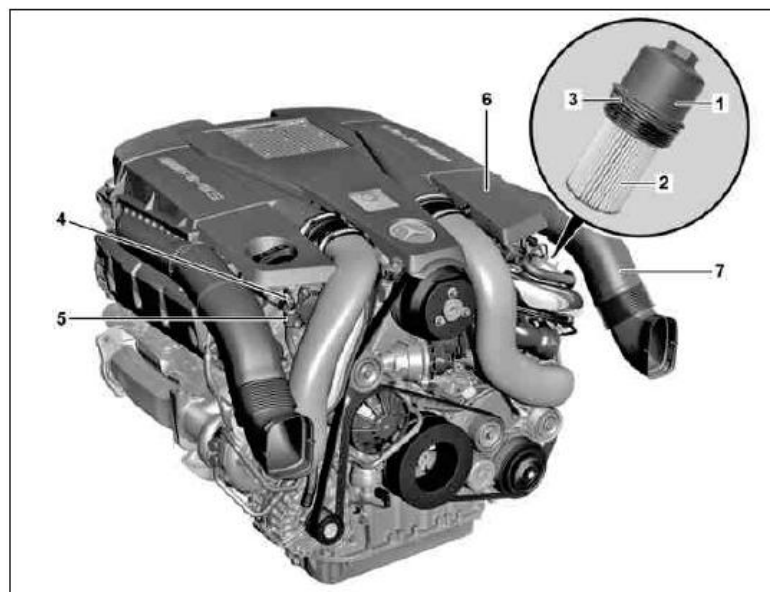


Fig. 18: Identifying Socket Wrench Bit (642 589 00 09 00)

Courtesy of MERCEDES-BENZ USA

Engine 157 in model 166, 212, 216, 217, 218, 221, 222, 231, 292

- 1 Oil filter screw-on cover
- 2 Oil filter element
- 3 Sealing ring
- 4 Oil dipstick
- 5 Oil measuring pipe
- 6 Left front engine cover
- 7 Left engine suction air duct



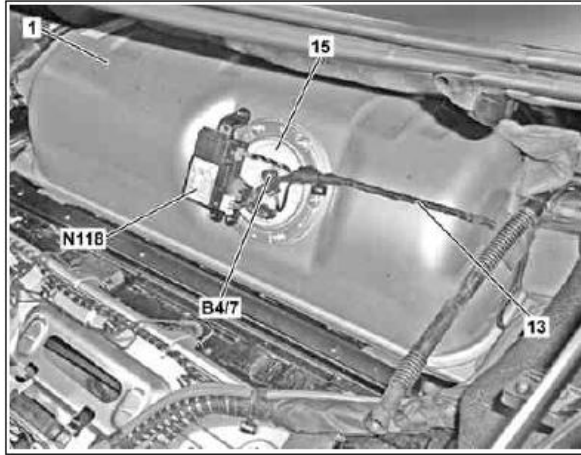
P18.00-2361-06

Fig. 19: Identifying Oil Filter Element, Sealing Ring And Oil Dipstick

Courtesy of MERCEDES-BENZ USA

 Danger!	Risk of injury to skin and eyes due to handling of engine oil.	Wear protective gloves, protective clothing and safety glasses.	AS18.00-Z-0001-01A
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- 1 Fuel tank
- 13 Electrical line
- 15 Fuel filter
- B4/7 Fuel pressure sensor
- N118 Fuel system control unit



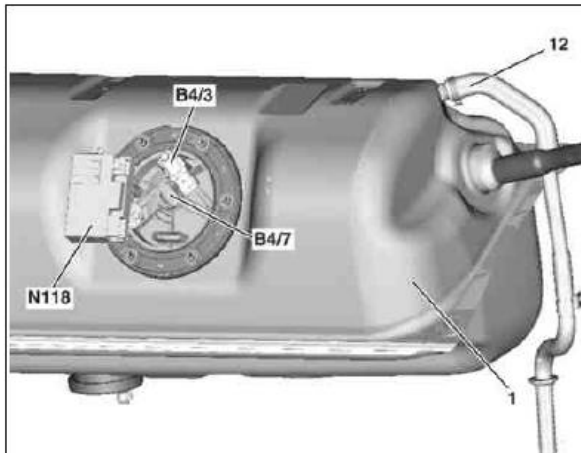
P47.10-2581-11

Fig. 6: Identifying Fuel Tank Remove/Install Components - Vehicle Without Code (494)

Courtesy of MERCEDES-BENZ USA

Vehicle with code (494) USA version

- 1 Fuel tank
- 12 Vent line
- B4/3 Fuel tank pressure sensor
- B4/7 Fuel pressure sensor
- N118 Fuel system control unit



P47.10-2589-11

Fig. 7: Identifying Fuel Tank Remove/Install Components - Vehicle With Code (494)

Courtesy of MERCEDES-BENZ USA

Using micrometer, measure all journals in 4 areas to determine journal taper, out-of-round and undersize. See [Fig. 20](#). Some crankshafts can be reground to the next largest undersize, depending on the amount of wear or damage. Crankshafts with rolled fillet cannot be reground and must be replaced.

A - B = Vertical Taper
C - D = Horizontal Taper
A - C & B - D = Out-Of-Round

Check For Out-Of-Round At Each End Of Journal

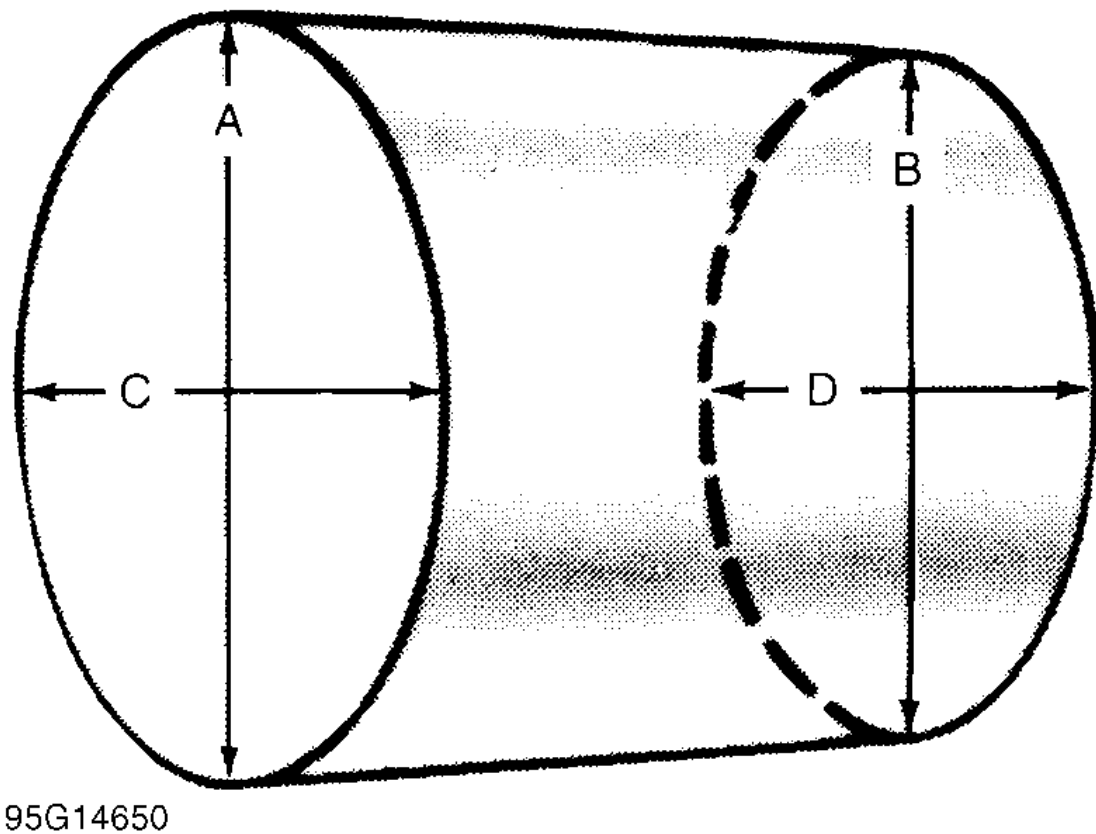


Fig. 20: Measuring Crankshaft Journals

Crankshaft journal runout should be checked. Install crankshaft in "V" blocks or bench center. Position dial indicator with tip resting on the main bearing journal area. See [Fig. 21](#). Rotate crankshaft and note reading. Journal runout must not exceed specification. Repeat procedure on all main bearing journals. Crankshaft must be replaced if runout exceeds specification.

Number	Designation		MODEL 230	MODEL 240
BA91.60-P-1026-01A	Bolt, pedestrian protection sensor (B151/2)	Nm	-	-

AIRBAG

Number	Designation		MODEL 414.700
BA91.60-P-1001-01A	Bolt, airbag to steering wheel	Nm	7
BA91.60-P-1002-01A	Bolt, control unit to vehicle floor	Nm	8
BA91.60-P-1003-01A	Nut of front passenger airbag unit to dashboard mounting	Nm	-
BA91.60-P-1004-01A	Bolt, front passenger airbag unit to dashboard mounting	Nm	10
BA91.60-P-1005-01A	Nut, windowbag unit to roof frame	Nm	-
BA91.60-P-1006-01A	Bolt, sidebag to door frame	Nm	-
BA91.60-P-1007-01A	Windowbag gas generator nut/bolt	Nm	-
BA91.60-P-1008-01A	Bolt for windowbag check strap	Nm	-
BA91.60-P-1009-01A	Bolt, windowbag in the latching plate area	Nm	-
BA91.60-P-1010-01A	Bolt, windowbag inflator	Nm	-
BA91.60-P-1011-01A	Sidebag and windowbag bolt to crossmember beneath rear seat	Nm	-
BA91.60-P-1012-01A	Bolt, sidebag and windowbag sensor to cross member below front seat	Nm	-
BA91.60-P-1013-01A	Bolt, frontal acceleration sensor to front module support	Nm	-
BA91.60-P-1014-01A	Nut, sidebag to seat frame	Nm	-
BA91.60-P-1015-01A	Bolt, sidebag unit	Nm	-
BA91.60-P-1016-01A	Nut, front passenger airbag unit to dashboard	Nm	-
BA91.60-P-1017-01A	Nut, control unit to vehicle floor	Nm	-
BA91.60-P-1018-01A	Bolt, contact plate to airbag	Nm	-

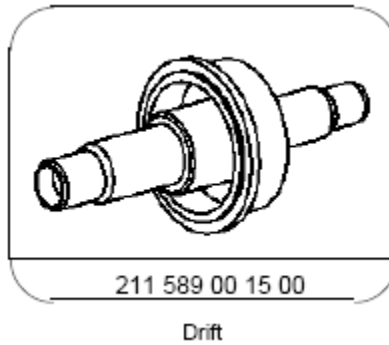


Fig. 81: Identifying Drift (211 589 00 15 00)

Courtesy of MERCEDES-BENZ USA

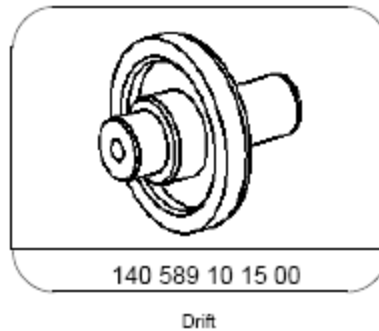


Fig. 82: Identifying Drift (140 589 10 15 00)

Courtesy of MERCEDES-BENZ USA

REPAIR MATERIALS

Number	Designation	Order number
BR00.45-Z-1061-01A	Sealant, Omnifit 100H (50 g)	A 002 989 23 71
BR00.45-Z-1046-04A	Loctite 7063 cleaning spray (150 ml)	A 001 986 71 71 10

REMOVE/INSTALL END COVER AT DIFFERENTIAL - AR35.31-P-0554V

Rear axle differential dia. 187 in MODEL 171.442/445/454, 172.447/448

Rear axle differential dia. 198 in MODEL 171.456 up to 31.5.05

Rear axle differential dia. 200 in model 171.456 as of 1.6.05, 171.458, 172.403/457

Rear axle differential dia. 200 in MODEL 172.475 except CODE (471) Manual locking differential

Rear axle differential dia. 215 in MODEL 171.473

Rear axle differential dia. 215 in MODEL 172.475 with CODE (471) Manual locking differential

Illustrated on model 171.456