

03-3160 Removing and installing pistons

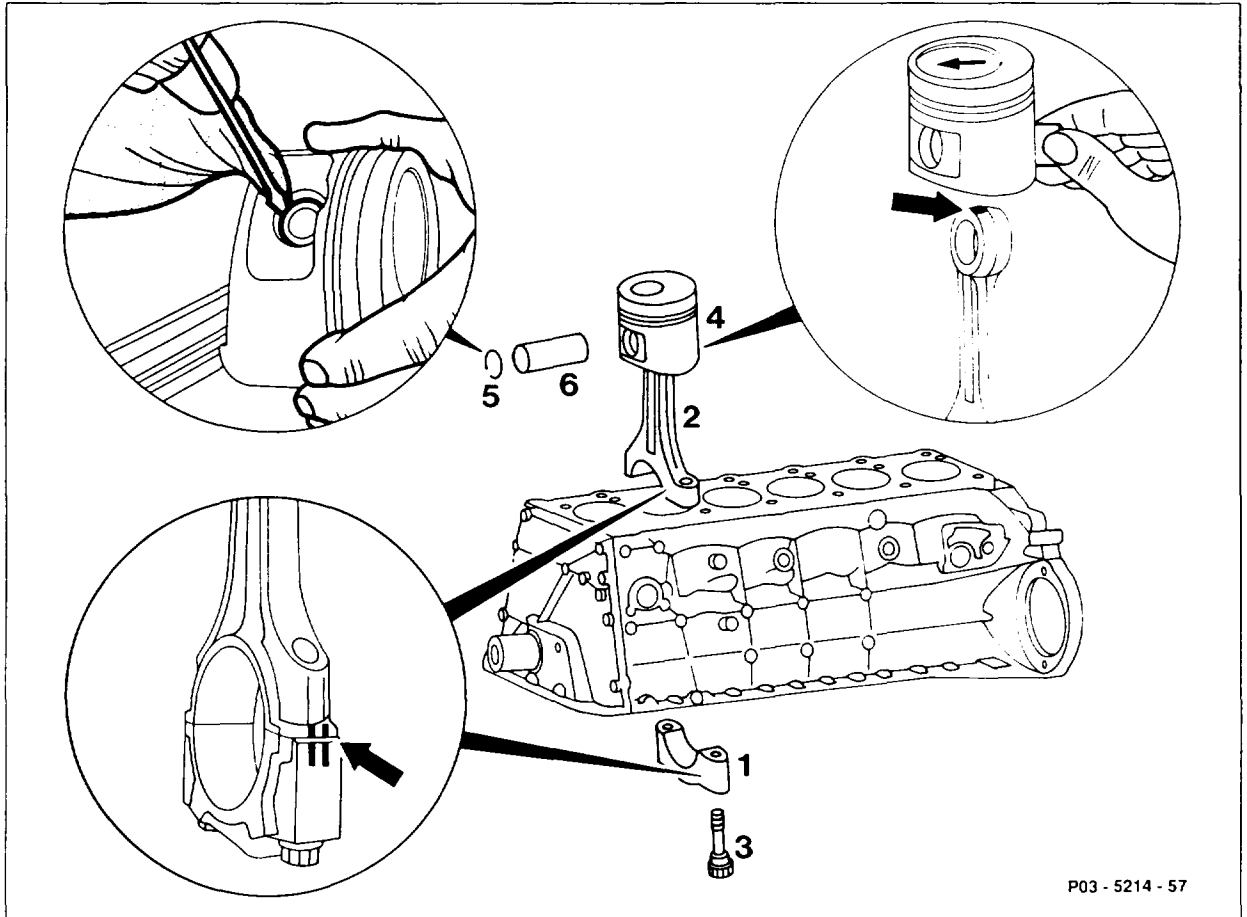
Preceding work:

Engine removed (01-0300).

Cylinder head removed (01-4150).

Oil pump removed (18-2100).

Engine 103.984: oil shield plate removed (18-2180).




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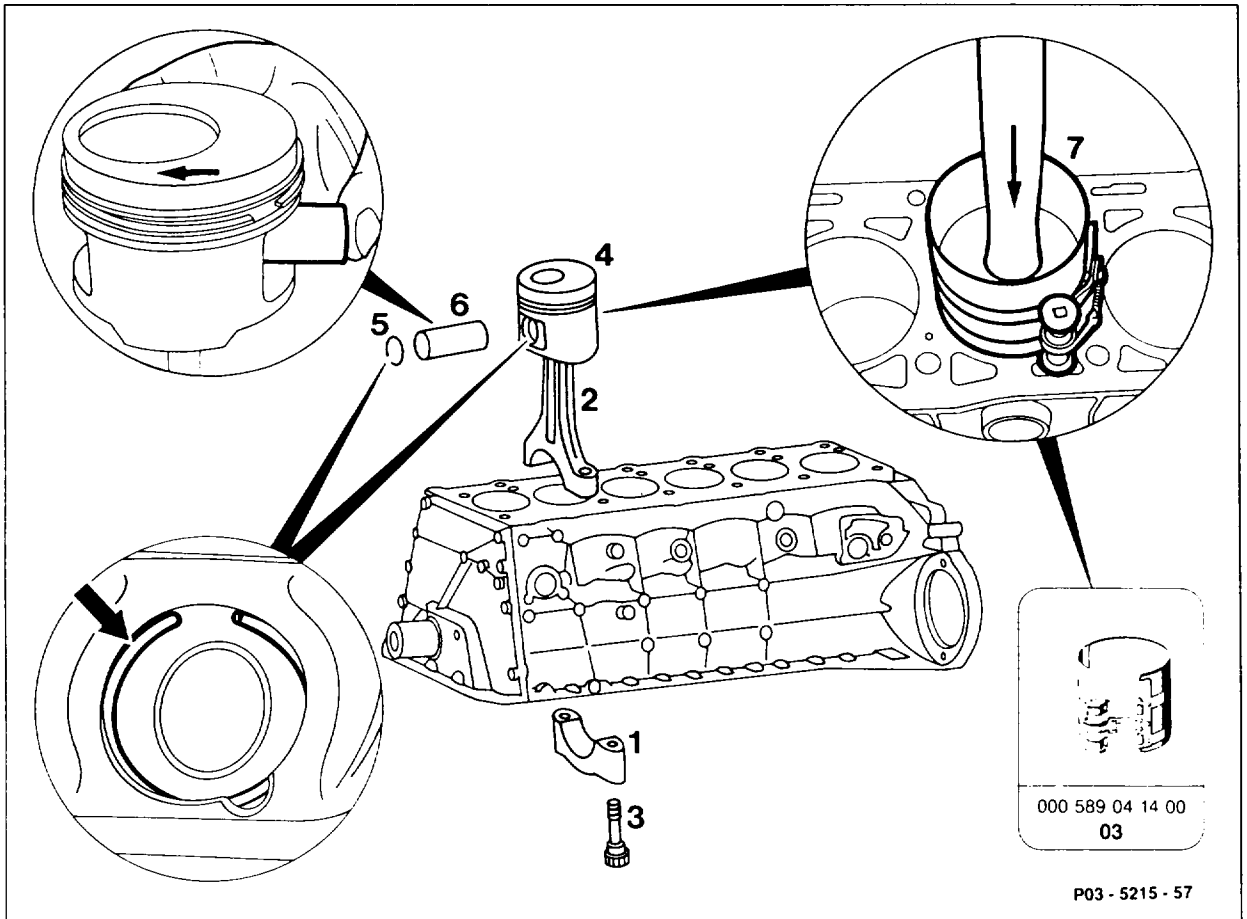
Removing pistons

- | | |
|---|----------------------|
| Conrod bearing cap (1) | unscrew. |
| Conrod (2) and conrod bearing cap (1) | are marked together. |
| Conrod (2) with piston (4) | remove upward. |

Detaching, attaching piston

- | | |
|---|--|
| Piston pin retainer (5) | press out with screwdriver. |
|  | |
| Clean rag | use as base. |
| Conrod | repair, align (03-3130). |
| Piston rings | check gap and end clearance (03-3170). |

Piston pin (6) and conrod bushes oil.
 Piston (4) and conrod (2) install together.
 The angled spray hole in the small conrod bush
 (arrow) and the arrow in the piston crown must
 be facing in direction of travel.



Piston pin (6) press in by hand.
 Piston pin retainer (5) insert into groove (arrow).
 Cleaned cylinder bores, conrod bearing journals,
 conrod bearing shells and piston (5) oil.
 ⚠
 Conrod bearing shell with oil drilling install in conrod (2).

Installing piston

Tensioning strap (7) 000 589 04 14 00

for piston rings fit on, tension.

Piston (4) install with arrow in direction of travel.

Conrod (2) and conrod bearing cap (1) install with marking (arrow) to each other.

Conrod bolts (3) check, tighten (03-3100).

Crankshaft rotate, check clearance.

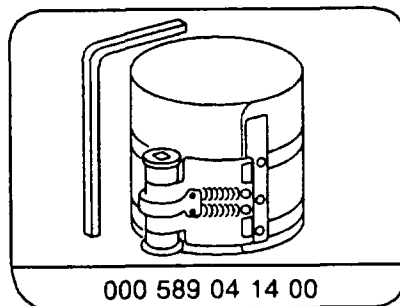
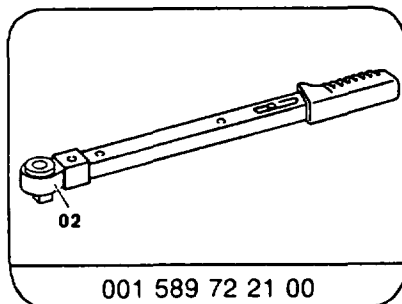
Data in mm

Piston projection 1)

0.72 – 0.92

1) The piston projection for standard, repair size I and II is identical.

Special tools



Note



Install new pistons with piston rings in used engines only if the cylinder bore does not show any abnormal wear, is within the dimensional tolerances for cylinder shape and concentricity and the honing is visible and undamaged.

Note

In the case of reconditioned engines, determine repair size (01-1100), then order pistons according to the valid parts documentation.

Pistons to counter increased oil consumption, production breakpoint: 12/1992

Engine number

103.984 10 001672

103.884 12 008781

103.985 12 022060

103.987 10 001240

103.987 12 003076