PIERBURG

Service information

si

Vacuum pump

si 0025/A GB

Notes for the installation of a new vacuum pump
Wear on the stroke curve

MSI-PG 11.02

Vacuum generation

Vehicle:	MB Diesel passenger cars from construction year 1968 on →	**Product:**	Vacuum pump Pierburg ref. no. **7.20208...** **7.20547...** **7.20607...**
			O.E. ref. no. various*

Installation notes

Attention!
Vacuum pumps are safety parts. Therefore installation and removal may only be carried out by authorized specialist workshops.

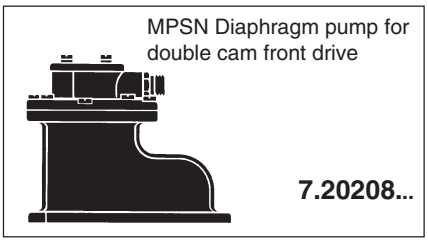


Fig. 1

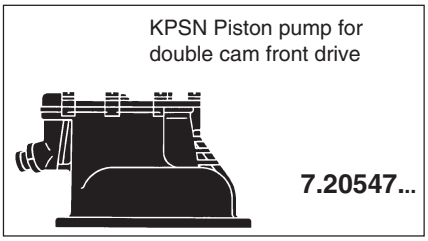


Fig. 2

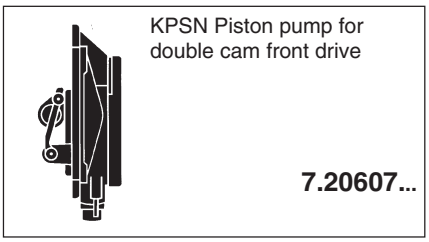


Fig. 3

For Vacuum pumps:
7.20208..., fig. 1
7.20547..., fig. 2
7.20607..., fig. 3

- Install vacuum pump only if the stroke curve is in a perfect condition; see chapter “wear on the stroke curve”.
- Install only when the cams are in their lower position, and screw on crosswise
- Always use the new enclosed gasket.

For 7.20607..., fig. 3

- Before installing this vacuum pump the assembly basket (3, fig. 4) of older vehicles should be removed. It is screwed on in the crankcase in front of the injection adjusting device.
  New vehicles don’t have this assembly basket any more.

Attention. The assembly basket must not be installed again after removal.
It may only be installed as an aid during removal of the injection pump. This ensures that the injection adjusting device will not get stuck when the engine turns.

For 7.20547..., fig. 2
For 7.20607..., fig. 3

- After installation of the vacuum pump leave the vacuum line open for the time being.
- Install belt, fan, and fan hood.
- With the engine running fill in approximately 50 cm^3 of clean engine oil into the vacuum pump using the open vacuum connection, and connect vacuum line immediately.

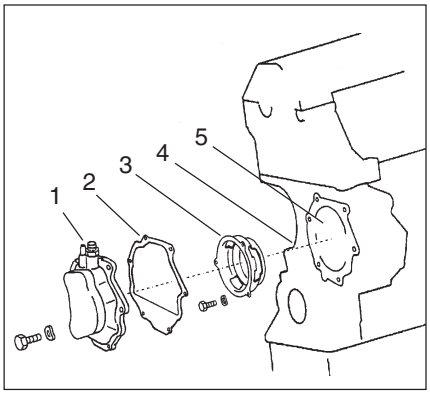


Fig. 4

1 vacuum pump
2 gasket
3 assembly basket
4 crankcase
5 injection adjusting device inside the crankcase

Reg. Nr. 4/4 03-130.2 GB - ND 11.02

* For part matching and spare part references refer to the catalogs in effect.

Subject to change of illustrations and text!

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Wear on the stroke curve
(curved disk)

When replacing the vacuum pump shown here make sure that the stroke curve is not worn or damaged.
Fig. 5 shows a stroke curve without wear, that is with a smooth and plane path.
Fig. 6 shows a stroke curve with extreme wear and heavily used path (deep profile).
If the slightest sign of wear is noticeable or for each change with previous drive damage, the lifting cam must be renewed in accordance with MB repair instructions.

Note: The stroke curve - as shown in fig. 5 (for 7.20607...) is no longer available as an individual spare part. Therefore the complete injection adjusting device must be replaced.

Important: If in the event of minimum wear of the lifting cam or in the event of deviations form the nominal mounting dimensions, only the vacuum pump is renewed, damage to the vacuum pump and possibly the motor is preprogrammed.
In such cases Pierburg will not accept any warranty.
To decide whether or not a warranty case is justified, the stroke curve must be returned to Pierburg for evaluation in all instances.

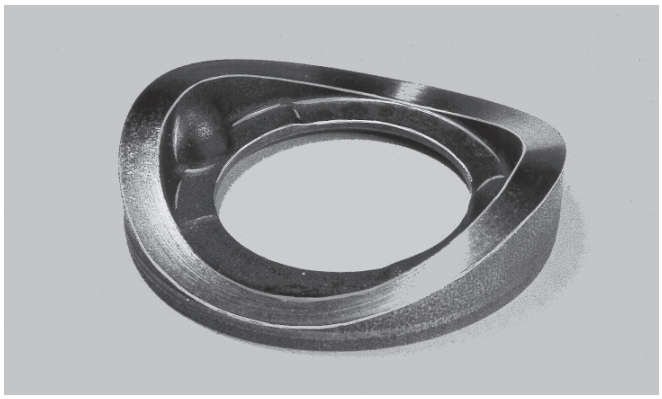


Fig. 5



Fig. 6

Nominal values: according to fig. 7/ table 8
B and C are the installation dimensions of a correct vacuum pump that has been installed with the cams in their lower position, and a stroke curve in good condition.

Function check:
As described in “Service Tips & Info Vacuum pumps”

Test equipment:
Vacuum pump tester
Order reference no. **4.07370.06.0**

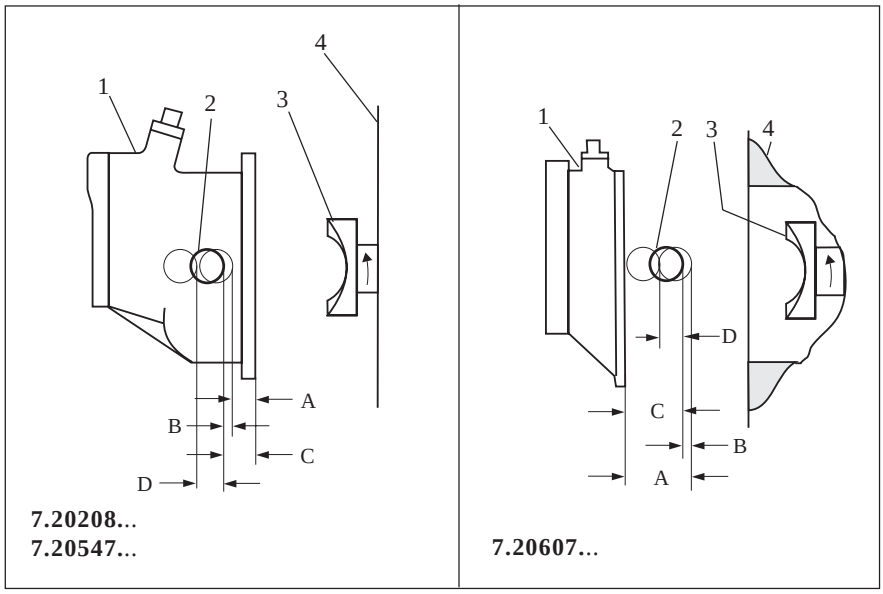


Fig. 7 Schematic view
1 vacuum pump
2 roller
3 stroke curve
4 crankcase

Vacuum pump	7.20208...	7.20547...	7.20607...
A-removal dimension	11,4±0,6	11,5±0,6	46,3±0,4
B-pre-tension	0,5 to 2,7	0,7 to 2,3	0,15 to 3,21
C-installation dimension	13±0,5	13	44,62±1,13
D-stroke	10	10±0,1	12±0,05

Table 8 (Values in mm)