

## 14-450 Removal and installation of intake manifold upper and lower part, renewing gaskets

Job No. of flat rates or standard texts and flat rates data 14-240.

### Note

When removing and installing intake manifold the mixture control unit with air guide housing does not need to be removed.

### Changes on intake manifold

In order to standardize with the USA design, the following parts have been changed:

- a) Intake manifold upper part:  
Vacuum connection for automatic transmission changed.
- b) Intake manifold lower part and throttle valve housing:  
Fixing of the throttle valve housing to the intake manifold lower part is effected with M6 screws (formerly M8).
- c) Air guide housing:  
The flange of the air guide housing is made of light alloy, the air guide housing of rubber.

### Replacement parts

Engine	Designation	Former Part No.	Current Part No.
116	Intake manifold upper part	116 140 48 01/57 01	116 140 70 01
117	Intake manifold upper part	117 140 52 01/57 01	117 140 67 01
116/117	Intake manifold lower part	117 140 48 01	116 140 78 01
116/117	Throttle valve housing	001 140 19 53	001 140 29 53
116/117	Air guide housing	117 141 07 90	116 140 01 18

Supply responsibility: Werk 50 (PEW Sindelfingen)

The former parts are carried over.

### Installation engine 116: April 1981

Model	Engine	Engine end number	Vehicle identification end number
107.025	116.960	009373	002861
107.045			006350
126.032	116.961	015686	015529
126.033			

### Installation engine 117

Installation on engine 117 took place in stages.  
The following listing shows the respective installation data for the current version.

#### First installation: April/May 1981

Model	Engine	Engine end number	Vehicle identification end number
107.026 107.046	117.960	003337–003363	002541–002551 000723–000737
126.036 126.037	117.961	010458–010654	010312–010509

#### Second installation: June 1981

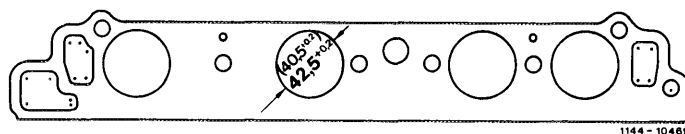
Model	Engine	Engine end number	Vehicle identification end number not recorded
107.026 107.046	117.960	003504–003710	— —
126.036 126.037	117.961	012634–012636	—

#### Final installation: starting August 1981

Model	Engine	Engine end number	Vehicle identification end number
107.026 107.046	117.960	003777	002731 000954
126.036 126.037	117.961	012996	012895

#### d) Intake manifold gasket:

The cross-section of gasket had to be enlarged.  
When renewing the gasket, make sure that the  
respectively valid gasket for the respective engine  
is installed. The former gasket is still available in  
spare parts depot.



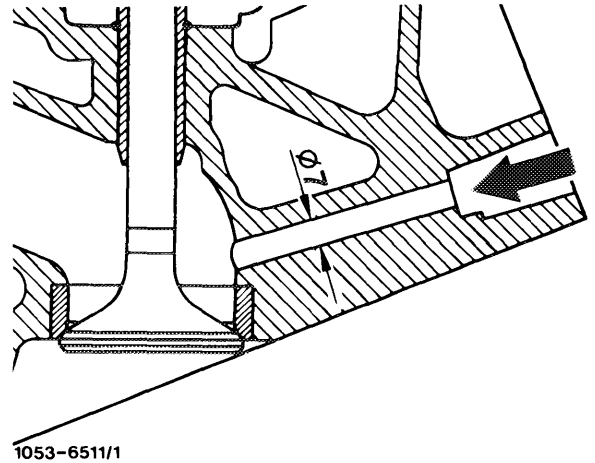
**Start of series:** August 1981

## Engines without air injection

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On engines with ET cylinder heads, which have 4 bores for the air injection to the exhaust valve (arrow), the latter have to be sealed with aluminium tapered plugs.

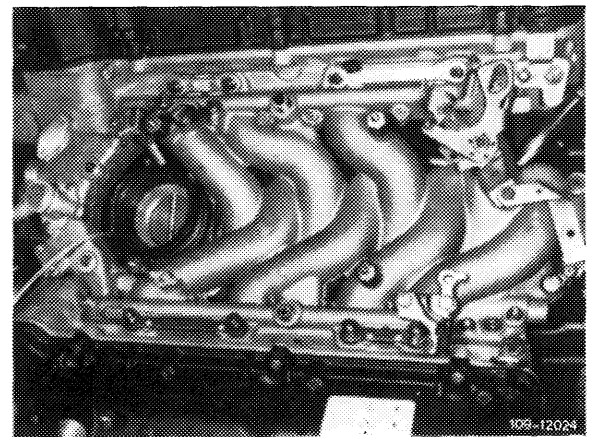
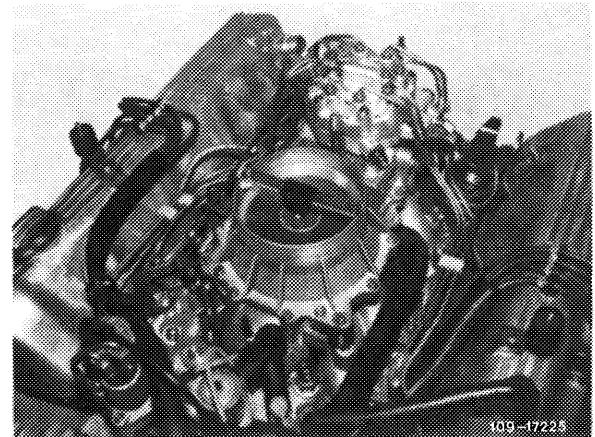
This ensures that no exhaust gas reaches the intake side via the bores (poor idle).



## Removal

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- 1 Disconnect battery.
- 2 Partially drain coolant (20-010).
- 3 Unscrew injection lines and fuel lines. Catch fuel with a rag.  
Close fuel lines blind.
- 4 Pull off auxiliary air lines.
- 5 Force off Bowden wire for automatic transmission.
- 6 Unscrew bearing bracket for guide block control.
- 7 Unscrew bearing bracket for longitudinal regulating shaft.
- 8 Pull off all connecting cables and plug connections.
- 9 Pull off vacuum line for automatic transmission and unscrew for brake unit.
- 10 Loosen and pull off coolant hoses.
- 11 Unscrew all fastening screws and remove intake manifold toward the rear.
- 12 Clean intake manifold and check flange surfaces with straightedge, level on surface plate, if required.



## Installation

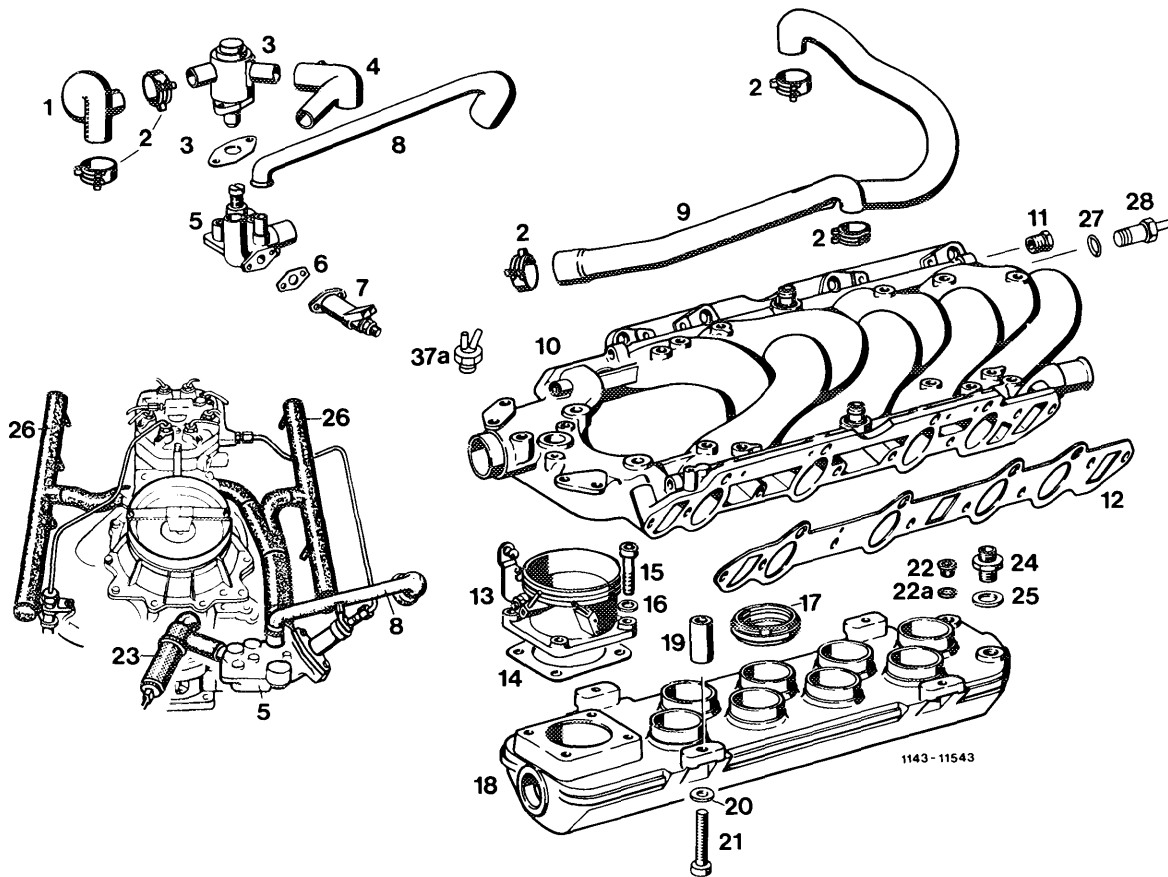
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- 13 Mount intake manifold in vice versa sequence with new gaskets.

Intake manifold gaskets are not graphited. Do not mix up graphited intake manifold gaskets of grey iron engine with those on light-alloy engine.

- 14 Adjust regulating linkage (30–300).
- 15 Connect battery.
- 16 Fill in coolant (20–010).
- 17 Run engine, check fuel lines for leaks. Check intake system, fuel distributor and injection valves for leaks by spraying with Iso-Oktan.
- 18 Adjust idle speed (07.3–100).

## Intake manifold



- |    |                            |    |                            |     |                                       |
|----|----------------------------|----|----------------------------|-----|---------------------------------------|
| 1  | Contour hose               | 11 | Closing plug               | 22  | Closing plug                          |
| 2  | Spring hose clamps         | 12 | Gasket                     | 22a | Sealing ring                          |
| 3  | Auxiliary air valve        | 13 | Throttle valve housing     | 23  | Idle speed adjuster                   |
| 3a | Gasket                     | 14 | Gasket                     | 24  | Double thread connection              |
| 4  | Contour hose               | 15 | Hex. socket screw          | 25  | Sealing ring                          |
| 5  | Idle speed air distributor | 16 | Washer                     | 26  | Air feed for injection valves         |
| 6  | Gasket                     | 17 | Rubber connection          | 27  | Sealing ring                          |
| 7  | Cold start valve           | 18 | Intake manifold lower half | 28  | Connection for automatic transmission |
| 8  | Contour hose               | 19 | Spacing sleeve             |     |                                       |
| 9  | Auxiliary air line         | 20 | Washer                     |     |                                       |
| 10 | Intake manifold upper half | 21 | Hex. socket screw          |     |                                       |