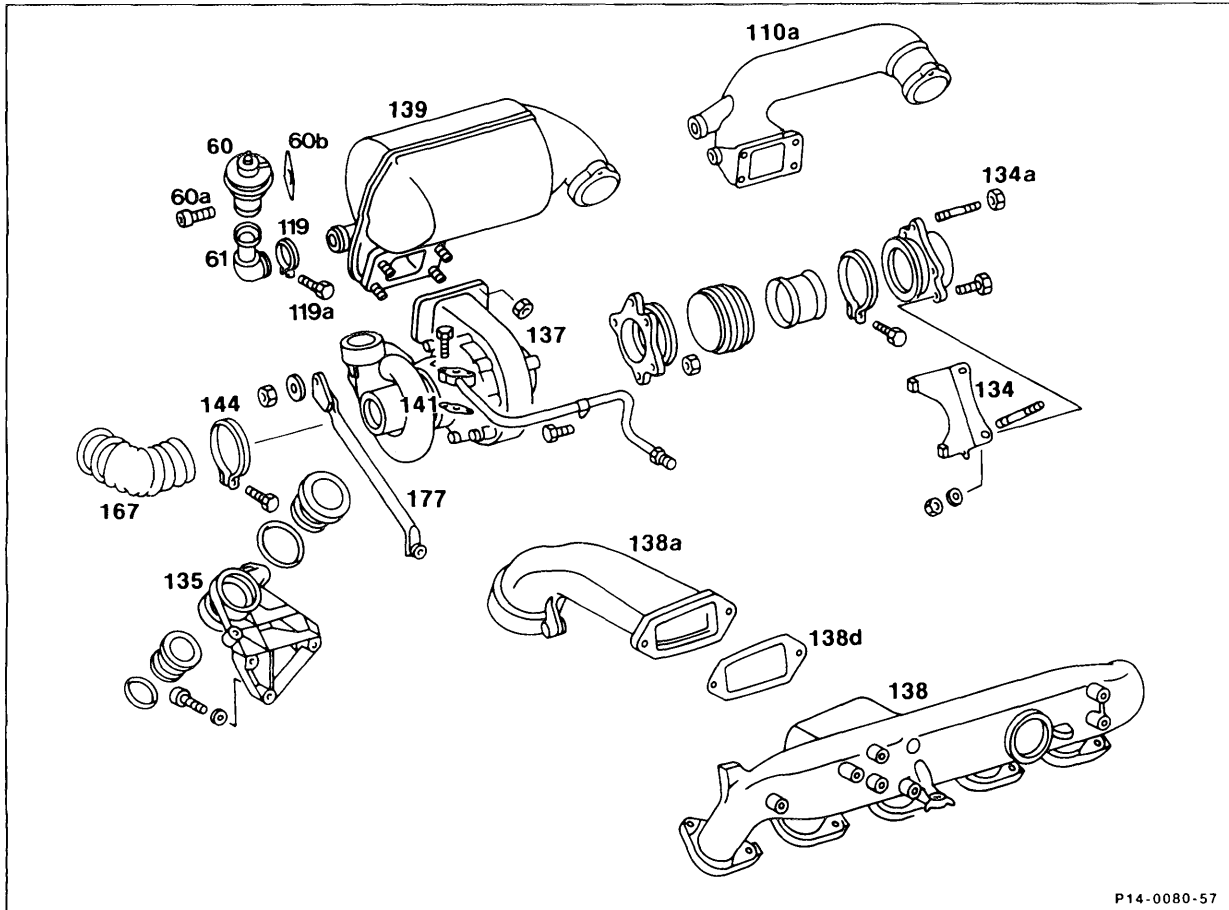


09-150 Removal and Installation of turbocharger



P14-0080-57

| | |
|--|---|
| Vehicle | drive onto the platform or inspection pit. |
| Bottom section of noise encapsulation | detach, attach. |
| Air cleaner | remove, install (09-400). |
| Hose clip (144) | loosen and detach, attach intake hose (167). |
| Partition wall (A) between trap oxidizer and air cleaner | remove, install (9 bolts) of which 6 are accessible from above, 3 accessible from below (Figure 4). |
| Vacuum lines red/violet/brown on EGR valve (60) and red/violet/blue on air recirculation valve | detach, attach. |
| Clip (119) on corrugated pipe (61) | loosen, tighten. Tightening torque 45 Nm. |

| | |
|--|--|
| Corrugated pipe (61) | remove, install. |
| Exhaust gas recirculation valve (60) | remove, install. Tightening torque 25 Nm. |
| Trap oxidizer (139) on exhaust manifold | unbolt, bolt on. Tightening torque 45 Nm. |
| Supporting bracket | unbolt, bolt on and remove at the same time with trap oxidizer. |
| Charge air connecting line (138 a) | remove, install. Replace gasket (138 d). |
| Engine breather | detach, attach. |
| Mixing pipe (135) with exhaust gas recirculation valve (60) | remove, install. |
| Oil feed line (141) of turbocharger (137) | unbolt, bolt on. Replace seal. |
| Mounting bracket (134) | unscrew, screw on. |
| Nuts (134 a) (from top and bottom) | loosen, unscrew. |
| Mounting bracket (177) | remove, install. |
| Turbocharger (137) | remove, install. |

Note

The specified tightening torques are reference values.

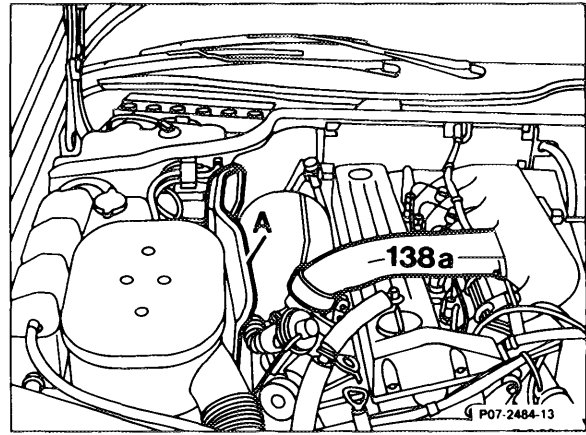
Removal, installation

Note

For the conversion, the car must be driven onto an inspection pit or platform.

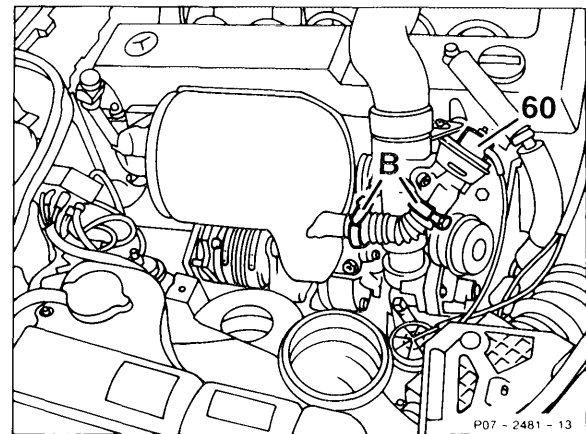
- 1 Completely remove noise encapsulation from below.
- 2 Remove air cleaner entirely.
- 3 Loosen hose clip (144) from air flow sensor and detach intake hose (167).

4 Remove partition wall "A" (9 bolts), of which 6 (WAF10) are accessible from above, 2 (WAF8) and 1 (WAF10) accessible from below.



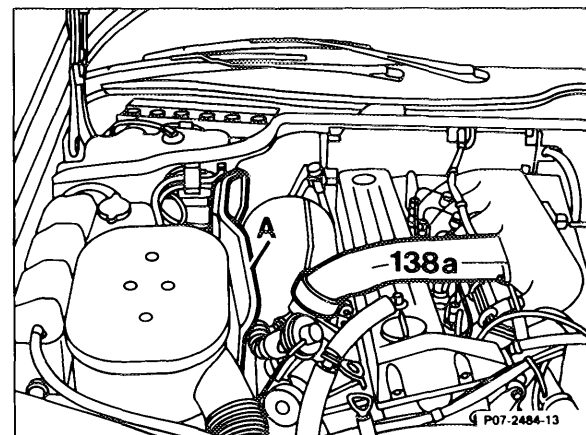
5 Detach vacuum lines red/violet/brown on EGR valve and red/violet/blue on air recirculation valve.

6 Loosen clips "B" on corrugated pipe, and remove corrugated pipe.



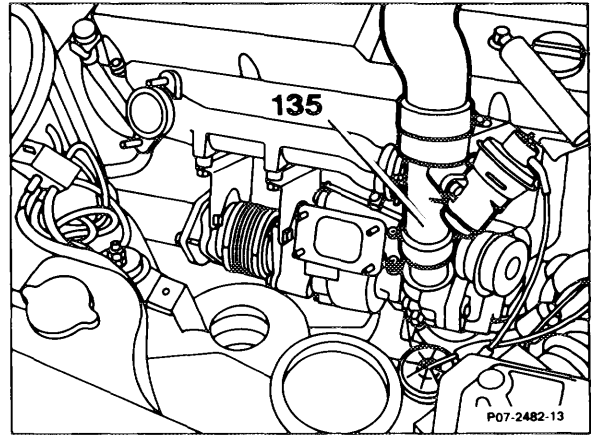
7 Unbolt trap oxidizer from exhaust manifold, remove trap oxidizer and supporting bracket at the same time.

8 Remove charge air connecting line (138 a).



9 Detach engine breather hose.

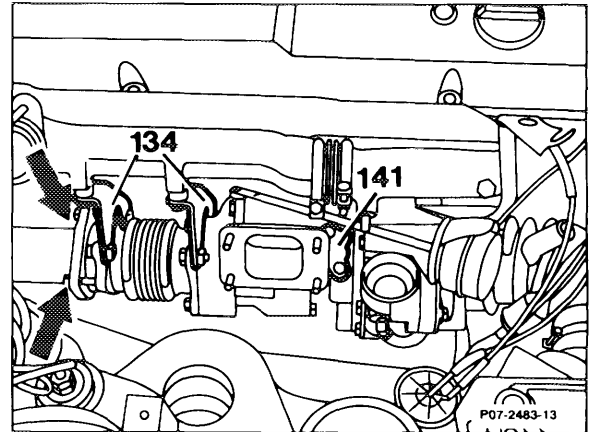
10 Detach mixing pipe (135) with exhaust gas recirculation valve from cylinder head.



11 Unbolt oil feed line (141) from turbocharger (replace seal).

12 Loosen both mounting brackets (134) on the exhaust manifold and turbocharger.

13 Loosen bolts of exhaust pipe - accessible from above (arrows).



14 Loosen bottom bolt of exhaust flange.

15 Unbolt mounting (177) from alternator flange to turbine housing on both components.

16 Remove turbocharger.

17 Install corrugated pipe with flange onto new turbocharger.

18 Clean sealing surfaces mechanically.

20 Install new trap oxidizer, insert supporting bracket at the same time and install. Tightening torque 45 Nm.

21 Install EGR valve together with corrugated pipe.

22 Install partition panel.

23 Connect vacuum line red/violet/brown to EGR valve and vacuum line red/violet/blue to air recirculation valve.

24 Connect intake hose to air flow sensor and tighten hose clip.

25 Install air cleaner complete.

26 Completely reinstall bottom section of noise encapsulation .