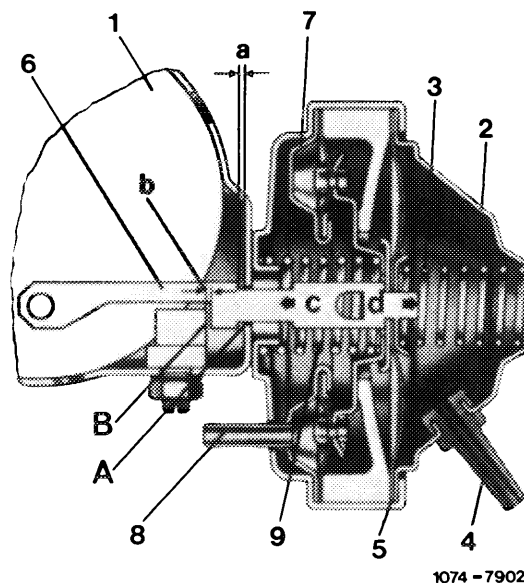


A. General information

The ignition distributor is provided with a single or a double vacuum control unit for vacuum adjustment of ignition timing. The single vacuum control unit serves for vacuum advance. The double unit is for vacuum advance and retard.

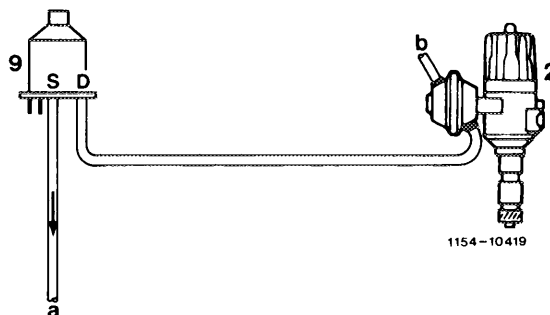


- 2 Vacuum advance unit
- 4 Hose connection vacuum advance unit
- 8 Hose connection vacuum retard unit
- 7 Vacuum retard unit

1074-7902

**Vacuum advance**

On singles as well as on double vacuum control unit the connection is pointing away from distributor (identified by a red ring). The other end of the vacuum line is directly connected to connection with red ring on throttle valve is sweeping over vacuum pickup bore.



1154-10419

**Vacuum retard**

Connection for vacuum retard is pointing toward distributor.

The vacuum retard unit is connected to contour hose between auxiliary air valve and idle speed air distributor, so that the vacuum adjustment becomes effective only after the auxiliary air valve is closed.

C. National version (AUS) (CH) (J) (S) (USA)

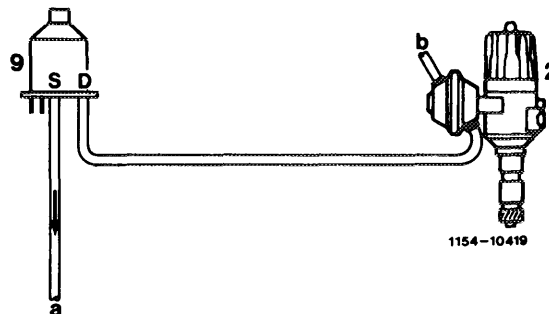
Standard version NV CAT (controlled) starting 1984

Vacuum connections

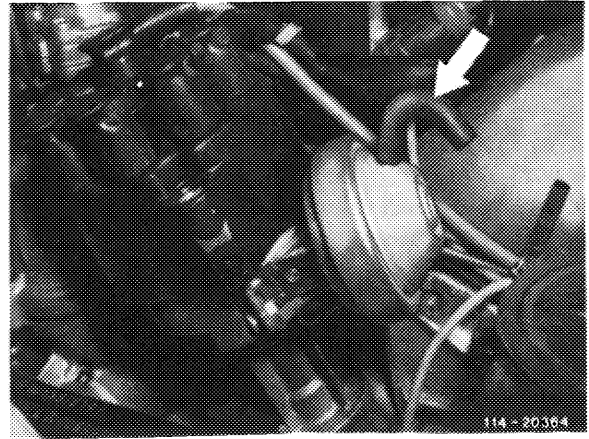
(AUS) starting 1981

(S) 1981/82, 1983 (up to February 1983)

Similar to standard version the vacuum retard unit is connected to contour hose between auxiliary air valve and idle speed air distributor. A switchover valve is installed for rpm stabilization, which cancels the vacuum retard when the electromagnetic clutch of refrigerant compressor is switched on.



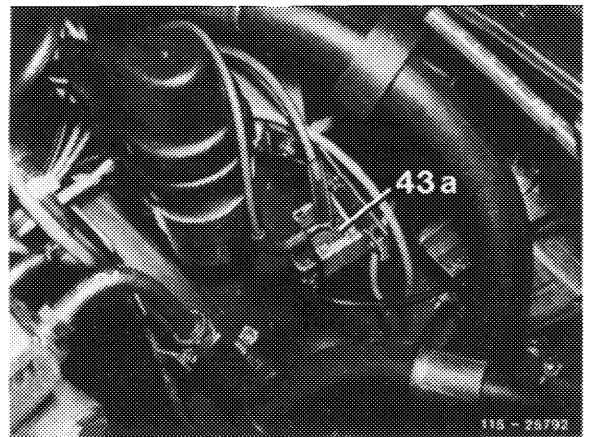
The vacuum control unit for vacuum advance on ignition distributor is not connected. The vacuum connection is open for connection of unit to atmosphere (arrow).



**CH** starting 1983

**S** starting 1983 (starting March 1983)

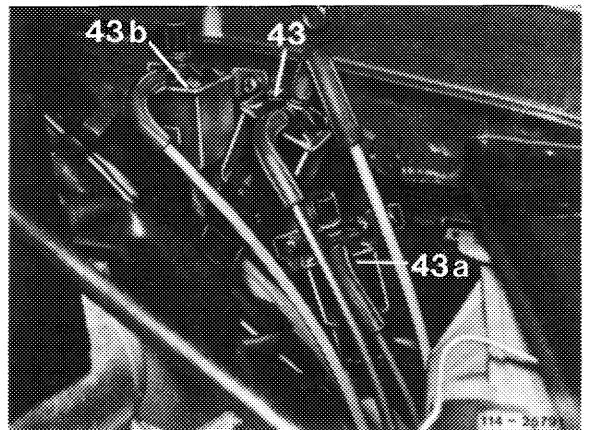
The vacuum advance unit is now directly connected to intake manifold by way of a switchover valve (43a).



Model 107

The vacuum advance is activated under the following conditions:

1. At oil temperatures below approx. 16 °C.
2. At coolant temperatures above approx. 100 °C.
3. At engine speeds above approx. 2300/min in temperature range above 16 °C oil and below 100 °C coolant.



Model 126

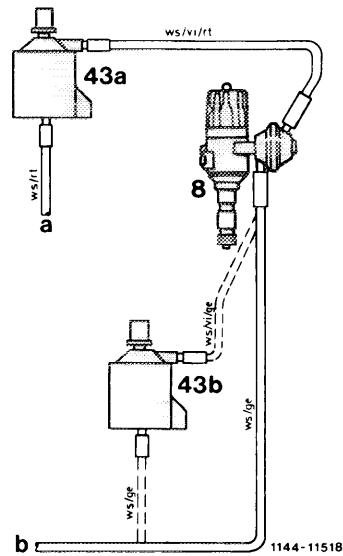
Under these conditions the switchover valve is de-energized and switches the vacuum to vacuum advance unit on ignition distributor. Ignition timing is advanced approx. 14–18°. Since the advance unit also influences the retard unit, the ignition timing (firing point) is also advanced at idle.

Vacuum advance is de-activated:

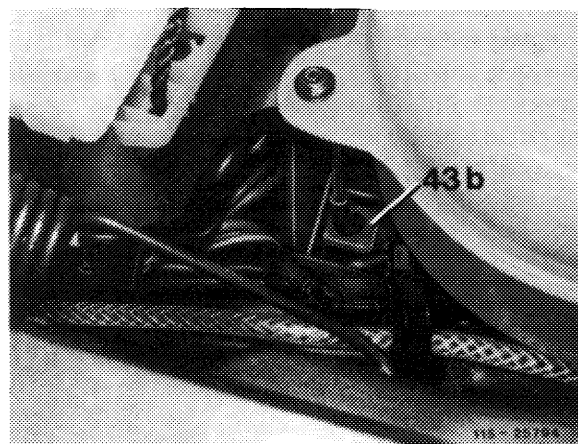
1. At oil temperatures above approx. 16 °C.
2. At coolant temperatures below approx. 100 °C.
3. At engine speeds below approx. 2100/min in temperature range above approx. 16 °C oil and below approx. 100 °C coolant.

The switchover valve is energized via control unit for air injection. The switchover valve switches the vacuum off and connects the vacuum control unit to atmosphere.

The vacuum retard adjustment corresponds to that prior to 1983.



- 43a Switchover valve ignition adjustment
- 43b Switchover valve rpm stabilization
  - a To intake manifold
  - b Via bypass valve toward throttle valve housing.



Model 107

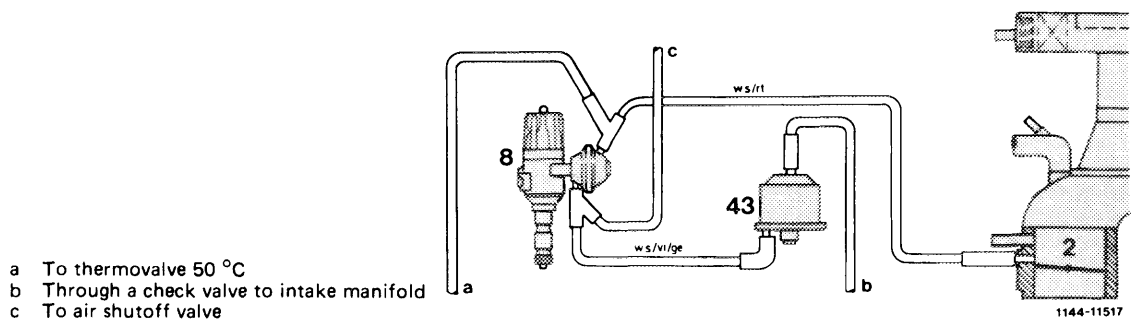
43b Switchover valve rpm stabilization

Ⓝ 1981

Ⓢ 1981

The vacuum advance unit is connected directly to throttle valve housing.

Vacuum retard will become effective only in temperature range above 16 °C oil and below 42 °C coolant temperature.



Ⓝ 1982

Ⓢ 1982

The vacuum advance unit is connected directly to throttle valve housing.

Vacuum retard is no longer installed.

Ⓝ starting 1983

Ⓢ starting 1983

**Standard version NV CAT (controlled)**

The ignition distributor has only one vacuum control unit for vacuum advance. The vacuum control unit is connected directly to intake manifold, so that vacuum advance becomes effective already at idle.