

### Hydraulic Test Program - Hydraulic Oil Pump Test

#### Preparation for Test

##### CAUTION!

Risk of severe injury, ensure that no persons are within the deployment radius of the roll bar during testing and repair.

Fully extend the roll bar prior to performing any repair work. Keep body parts away from the roll bar deployment radius and its mechanism.

##### CAUTION!

Risk of severe injury, to eyes and skin from escaping high pressure hydraulic fluid spray.

Risk of poisoning due to consumption of hydraulic fluid.

Depressurize the hydraulic system prior to performing repair work

Wear protective clothing and safety goggles.

#### Possible Risks:

##### Risk of Severe Injury

When opening hydraulic lines prior to releasing hydraulic pressure due to extreme hydraulic system pressures (200bar), which can cause serious injury to skin and eyes. Skin injury is possible if hydraulic oil (which is especially injurious) is allowed to contact unprotected skin.

##### Risk of Poisoning

Poisoning symptoms such as headache, dizziness, stomach pain, vomiting, diarrhea, cramps and loss of consciousness can occur due to the consumption of hydraulic fluid.

#### Protective measures/Conduct

- Depressurize the hydraulic system prior to starting repairs, if necessary drain the hydraulic fluid from the system.
- Do not fill hydraulic fluid into any liquid containers for dispensing liquids meant for human consumption.
- Vent the hydraulic system properly.
- Limit the access of hydraulic fluid to authorized persons only.
- Disconnected lines and hoses must be plugged with plugs immediately.
- Wear protective gloves, clothing and goggles.

If protective gloves can not be worn, follow the following points:

- Allow as brief as possible contact between skin and hydraulic fluid, clean any contaminated skin with soap and water.
- Remove any contaminated clothing immediately.

#### First Aid Measures

- Call Local Poison Control Center and advise of **any** consumption of hydraulic fluid.
- Call doctor and Poison Control Center if large amount of hydraulic fluid has been consumed.
- If hydraulic fluid has been sprayed into the eyes, wash eyes with liberal amounts of clean water using an eye wash system/kit.
- If person has been struck with an hydraulic spray to the skin or eyes, perform a doctor visit or hospital visit for close examination of the affected area.

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#### Preparation for Test continued:

#### Depressurization of the Power Soft Top/Roll Bar Hydraulic System

The hydraulic system depressurizes itself automatically after 2-3 activations of the power soft top.

After a system pressure test, it is possible that the hydraulic pressure within the power soft top/roll bar system does not depressurize.

In order to remove hydraulic pressure from the test line, there are 3 possibilities:

#### A

1. Close soft top, if necessary manually, but do not lock it.
2. Turn ignition ON and OFF quickly two times.

#### B

1. Connect HHT.
2. Connect Power Soft Top Test connector (X11/12) to chassis ground.
3. Turn ignition ON.
4. Perform: Activation (UVS) "reduce pressure".
5. Disconnect ground at (X11/12).

#### C

1. Ignition: OFF
2. Remove hydraulic unit relay (A7/5k1) from relay socket of hydraulic unit.
3. Ignition: ON
4. Press either RB switch (S83) or Power Soft Top switch (S84) briefly.



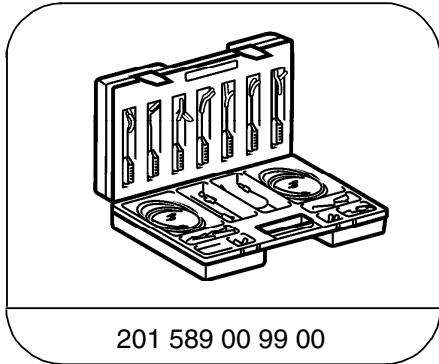
In the possibilities **B** and **C**, the exact position of the soft top is of no importance.

#### Preparation for Test:

1. Review 11 completely.
2. Review 32/1, 32/2 and 32/2 completely.
3. Connect HHT, see section 0.

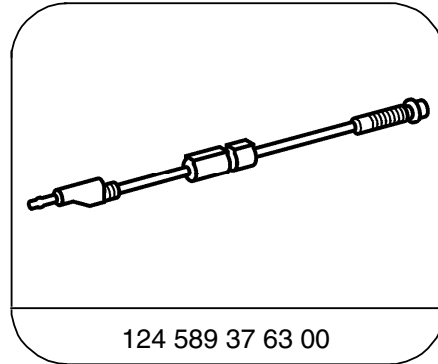
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Special Tools



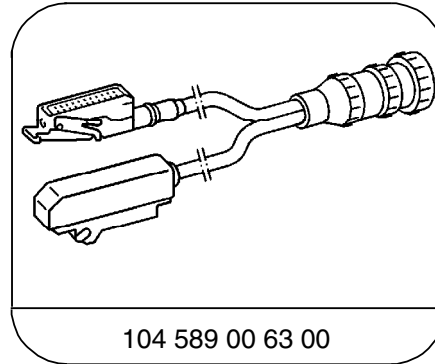
201 589 00 99 00

Electrical connecting set



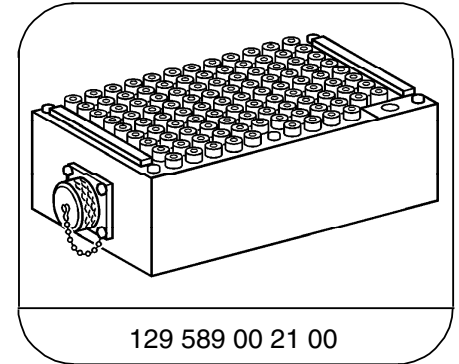
124 589 37 63 00

Fused cable



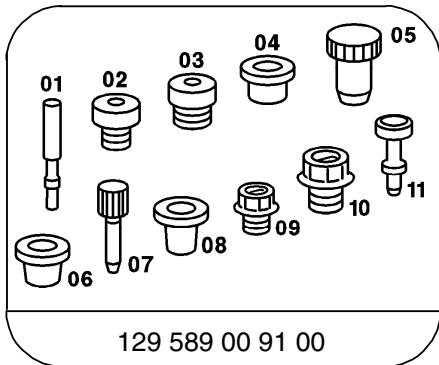
104 589 00 63 00

Test cable



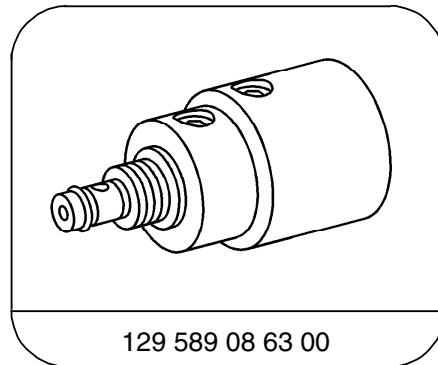
129 589 00 21 00

126-pin socket box



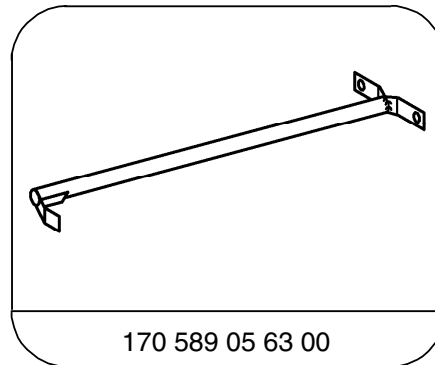
129 589 00 91 00

Set of plugs



129 589 08 63 00

Check valve



170 589 05 63 00

Assembly support for Vario roof

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Connection Diagram - Test gauge to RB hydraulic unit (power soft top) (A7/5)



In order not to pinch the test line "C" (Figure 1), carefully position and pass test line out of the trunk and then close trunk lid.

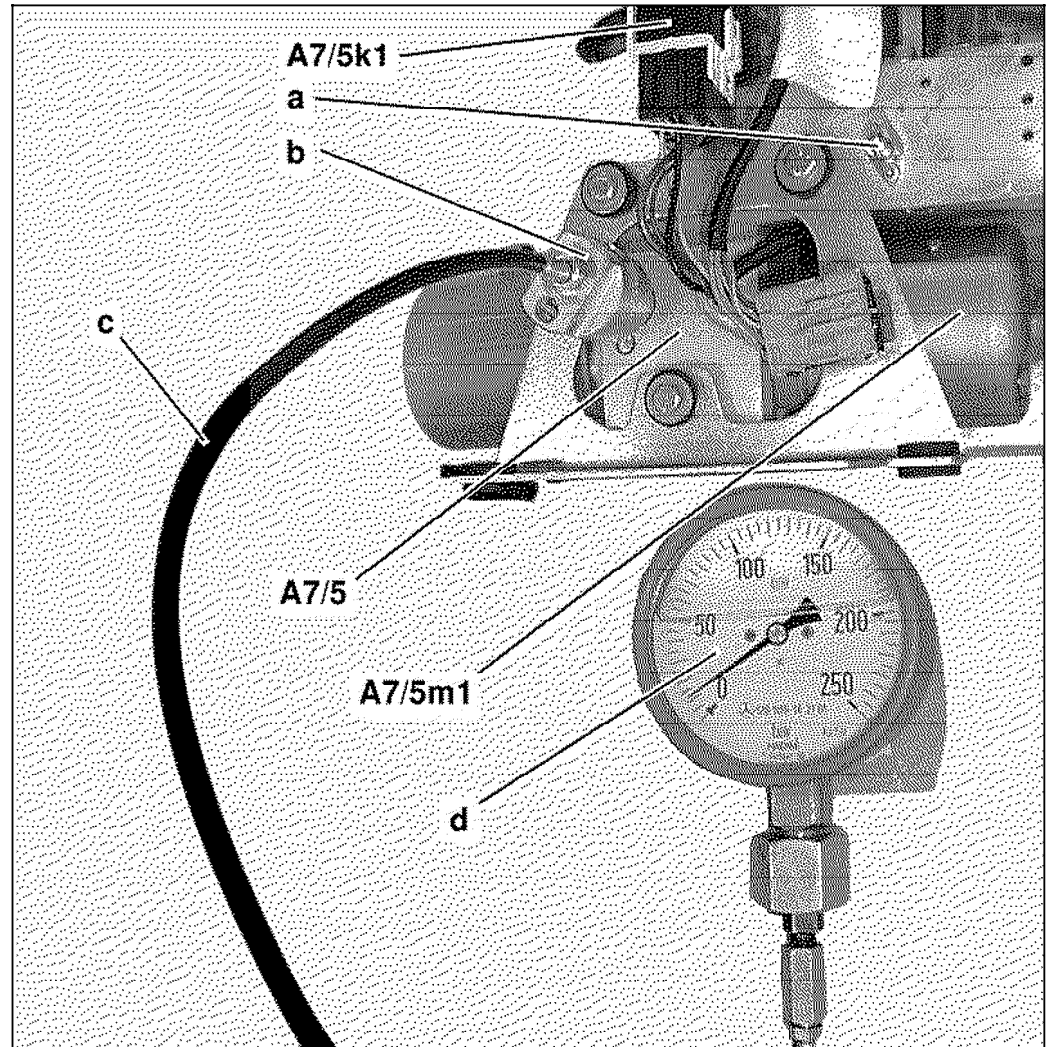

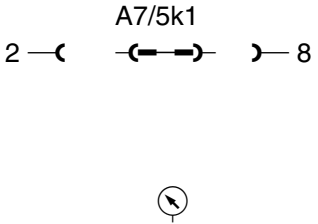


Figure 1


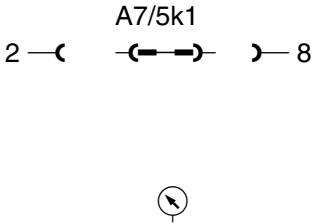
- A7/5 RB hydraulic unit (power soft top)
- A7/5k1 Hydraulic unit relay
- A7/5m1 Hydraulic unit motor
  
- a Emergency actuation valve for power soft top
- b Check valve
- c Test line
- d Gauge

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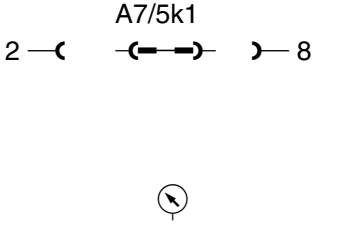

Hydraulic Test Program - Hydraulic Oil Pump Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0		<b>Hydraulic System Pressure Test</b>		Ignition: <b>OFF</b> Soft top: <b>Completely closed</b> Roll bar: <b>Extended</b> Connector at N52 disconnected. Hydraulic unit relay (A7/5k1) removed from socket. Connect test gauge, see 32/2 and 32/4  Connect safety cable (124 589 37 63 00) (min. 25 Amp) to relay socket. Read gauge pressure.	Pump runs.  Approx. 150 bar	Visual check: External leaks from entire hydraulic system.  ⇒ 1.1

Hydraulic Test Program - Hydraulic Oil Pump Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.1		Internal leaks of Fabric bow hydraulic cylinder Unlock/Lock		Roll bar: <b>Extended</b> Test gauge: Connected Depressurize hydraulic system, see 32/2 Fabric bow and soft top compartment cover: <b>UP</b> Disconnect hydraulic line no. <b>44 (return)</b> at fabric bow hydraulic cylinder (unlock/lock) and plug using blind plug (129 589 00 91 00). Connect safety cable (124 589 37 63 00) (min. 25 Amp) to relay socket. Read gauge pressure.	Pump runs.  Approx. 150 bar	If values are OK: Internal leaks from at fabric bow hydraulic cylinder. If values are not OK: ⇒ 1.2

## Hydraulic Test Program - Hydraulic Oil Pump Test

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.2		Internal leaks of soft top compartment cover hydraulic cylinder Unlock/Lock	 <p style="text-align: center;">A7/5k1</p> <p>2 —( —( —( —) ) —) —) — 8</p> <p style="text-align: center;"></p>	Roll bar: <b>Extended</b> Test gauge: Connected Depressurize hydraulic system, see 32/2 Fabric bow and soft top compartment cover: <b>UP</b> Disconnect hydraulic line no. <b>32 (return)</b> at soft top compartment cover hydraulic cylinder (unlock/lock) and plug using blind plug (129 589 00 91 00). Connect safety cable (124 589 37 63 00) (min. 25 Amp) to relay socket. Read gauge pressure.	Pump runs.  Approx. 150 bar	If values are OK: Internal leaks from at soft top compartment hydraulic cylinder. If values are not OK: RB hydraulic unit (power soft top) (A7/5).