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# Volkswagen

**Note:**

Not all models are explained because they are identic with others:

Golf 3 = Polo 3 = Vento = Caddy

Golf 4 = Bora

Passat = Corrado

Select the model:

Model Golf 3 VDO with phillips screws

Model Golf 3 VDO with Torx-Screws

Model Golf 3 MotoMeter Software 4.0-6.4

Model Golf 3 MotoMeter Software 3.0-3.1

Model Golf 3 TRW

Model Golf 4 VDO before Model 2001

Model Golf 4 MotoMeter before Model 2001

Model Golf 4 VDO Model 2001

Model Golf 4 MotoMeter Model 2001

Model Passat VDO SW 202, Model 1993-1996

Model Passat VDO, Model 1993-1996

Model Passat MotoMeter, Model 1993-1996

Model Passat MotoMeter, Software 1.3-1.8, Model 1993-1996

Model Passat MotoMeter, Model 1996-1997

Model Passat B5 after 1997

Model Passat B6

Model T4 before 10/1998

Model T4 after 10/98

Model Sharan before 6/2000

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Model Sharan after 7/2000

Model New Beetle

Model New Beetle model 2000

Model Lupo

Model Polo after 1998

Model Polo after 1998 TRW

Model LT VDO

Model Model LT Kienzle

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## Model Golf 3 VDO with phillips screws

Use the Motometer-Plug:



- Remove the cluster.
- Connect the power plug with the instrument and press the 4 pin programming plug into the fitting hole:

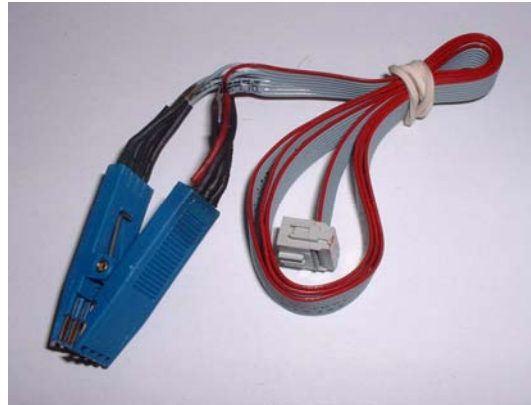
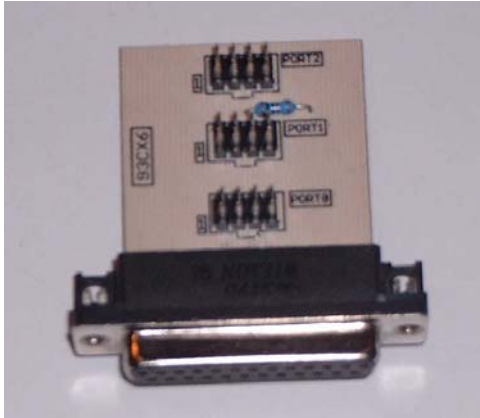


- Connect the Motometer-Plug with the Tacho Universal.
- Select the menu **Volkswagen-Golf 3-VDO +Schrauben-Diagnose**
- The Tacho Universal does not show you the old value.
- Enter the new value.
- Verify the new value with **OK**.

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## Model Golf 3 VDO with Torx-Screws

Use this board and clip:



- Remove the cluster open it.
- Look for the 8 pin chip 93C46.
- Connect the clip to port 1.
- Put the clip on the chip 93C46.
- Select the menu **Volkswagen-Golf 3- VDO Torx**
- The Tacho Universal shows you the old value.
- Select the menu **Adjust KM.**
- Enter the new value.
- Verify the new value with **OK.**

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## Model Golf 3 MotoMeter Software 4.0-6.4

Use the Motometer-Plug:



- Remove the cluster.
- Connect the power plug with the instrument and press the 4 pin programming plug into the fitting hole:

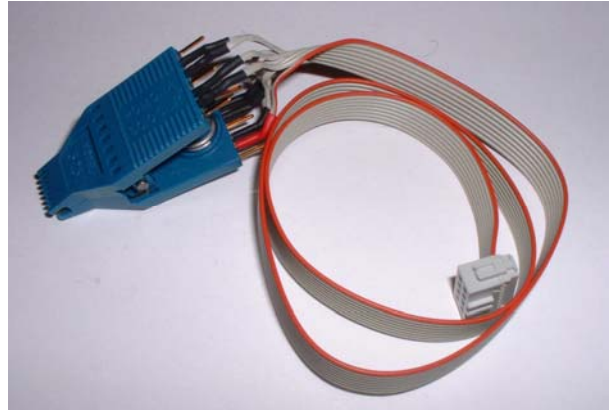
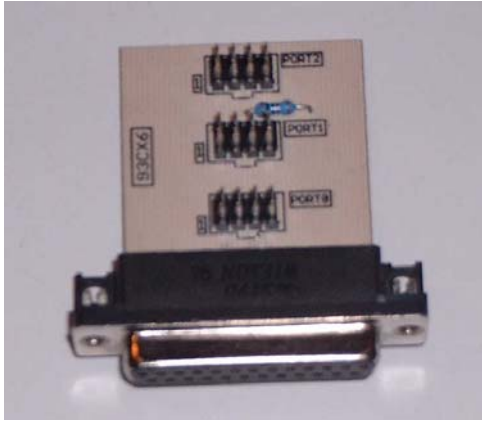


- Connect the Motometer-Plug with the Tacho Universal.
- Select the menu **Volkswagen-Golf 3-MM SW 4.0-6.4-Diagnose**
- The Tacho Universal does not show you the old value.
- Enter the new value.
- Verify the new value with **OK**.

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## Model Golf 3 MotoMeter Software 3.0-3.1

Use this board and clip:

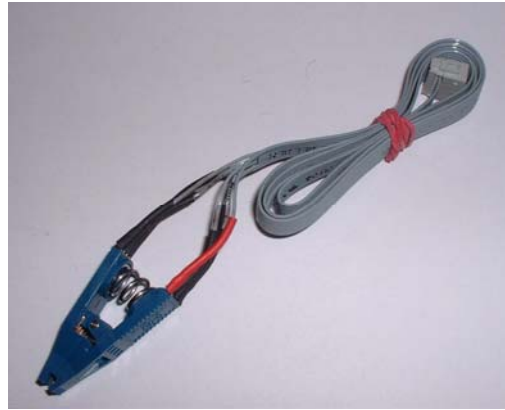
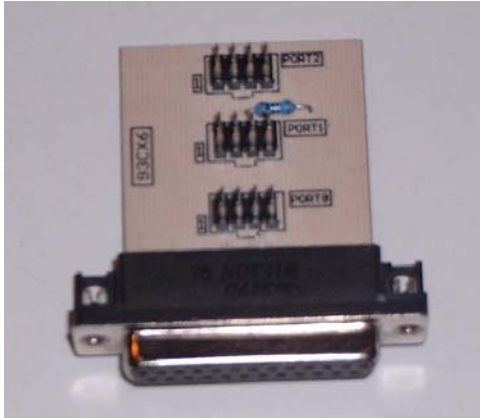


- Remove the cluster and open it.
- Look for the 14 pin chip 93C56.
- Connect the clip to port 1.
- Put the clip on the chip 93C56.
- Select the menu **Volkswagen-Golf 3- MM SW 3.0-3.1-Klammer**
- The Tacho Universal shows you the old value.
- Select the menu **Adjust KM.**
- Enter the new value.
- Verify the new value with **OK.**

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## Model Golf 3 TRW

Use this board and clip:



- Remove the cluster and open it.
- Look for the silver chrystal and join its contacts.
- Look for the 8 pin chip 93C46.
- Connect the clip to port 1.
- Put the clip on the chip 93C46 (red on pin 1).
- Select the menu [Volkswagen-Golf 3-TRW-Klammer](#)
- The Tacho Universal shows you the old value.
- Select the menu [Adjust KM.](#)
- Enter the new value.
- Verify the new value with [OK.](#)

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## Model Golf 4 VDO before Model 2001

Diagnostic programming

Use the OBD II - Plug:



The diagnostic port is behind a cover under the radio.

- Turn ignition on.
- Connect the Tacho Universal with the OBD II plug and the diagnostic port.
- Select the menu **Volkswagen-Golf 4-Diagnose VDO**
- The Tacho Universal shows you the old value.
- Enter the new value.
- Verify the new value with **OK**.

**Note:**

You can distinguish between VDO and MotoMeter with the program **Service:**

→ VDO is called VDO

→ MotoMeter is called MM or BOO



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## Model Golf 4 MotoMeter before Model 2001

Diagnostic programming

Use the OBD II - Plug:



The diagnostic port is behind a cover under the radio.

- Turn ignition on.
- Connect the Tacho Universal with the OBD II plug and the diagnostic port.
- Select the menu **Volkswagen-Golf 4-Diagnose MM**
- The Tacho Universal shows you the old value.
- Enter the new value.
- Verify the new value with **OK**.
- Switch ignition off.
- Remove the fuse for the instrument for a few seconds.

**Note:**

You can distinguish between VDO and MotoMeter with the program **Service:**

→ VDO is called VDO

→ MotoMeter is called MM or BOO

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## Model Golf 4 VDO Model 2001

Diagnostic programming

Use these plugs:

OBD II



Audi A6 alt



VW neu



Connect those plugs together. If the VW new does not fit to the A6 old, you have to remove one of the pins in the A6 old plug. You can see which one it is, otherwise the plugs will not fit together. The A6 plug will still keep all functions!

The diagnostic port is behind a cover under the radio.

- Turn ignition on.
- Connect the Tacho Universal with the plug and the diagnostic port.
- Select the menu **Volkswagen-Golf 4-Diagnose VDO 2001**
- The Tacho Universal shows you the old value.
- Enter the new value.
- Verify the new value with **OK**.

**Note:**

You can distinguish between VDO and MotoMeter with the program **Service:**

→ VDO is called VDO

→ MotoMeter is called MM or BOO

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## Model Golf 4 MotoMeter Model 2001

Diagnostic programming

Use the OBD II - Plug:



The diagnostic port is behind a cover under the radio.

- Turn ignition on.
- Connect the Tacho Universal with the OBD II plug and the diagnostic port.
- Select the menu **Volkswagen-Golf 4-Diagnose MM 2001**
- The Tacho Universal shows you the old value.
- Enter the new value.
- Verify the new value with OK.
- Now you have to enter the code for the search program: 0000
- Now the program searches the access code. This can take a while, the Tacho Universal shows you the actual state.
- If the program has found the access code the new value will be programmed.

**Note:**

You can distinguish between VDO and MotoMeter with the program **Service:**

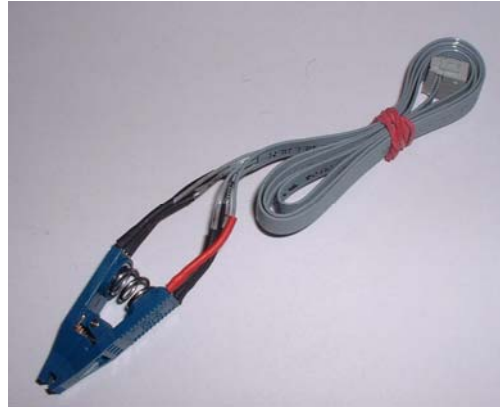
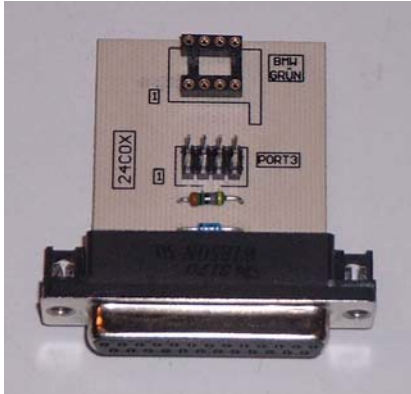
→ VDO is called VDO

→ MotoMeter is called MM or BOO

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If this takes too long for you, you can also program the eeprom directly:

Use this board and clip:

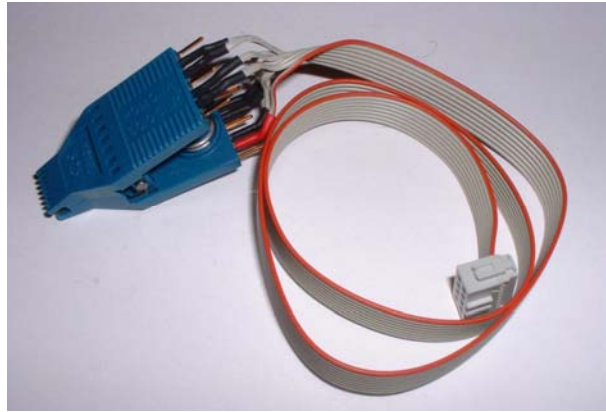
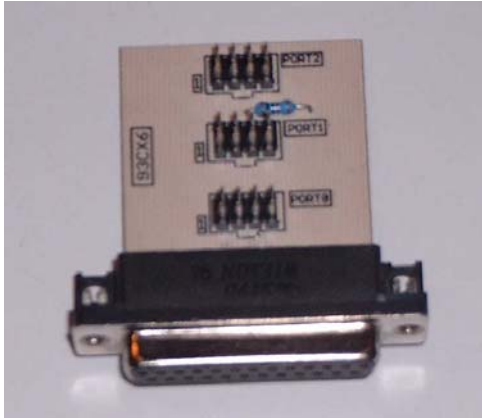


- Remove the cluster and open it (you have to remove the needles).
- Look for the 8 pin chip 24C02.
- Connect the clip to port 3.
- Put the clip on the chip 2402 (red on pin 1).
- Select the menu **Volkswagen-Golf 4- Klammer- MM Klammer '98**
- The Tacho Universal shows you the old value.
- Select the menu **Adjust KM.**
- Enter the new value.
- Verify the new value with **OK.**

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## **Model Passat VDO SW 202, Model 1993-1996**

Use this board and clip:

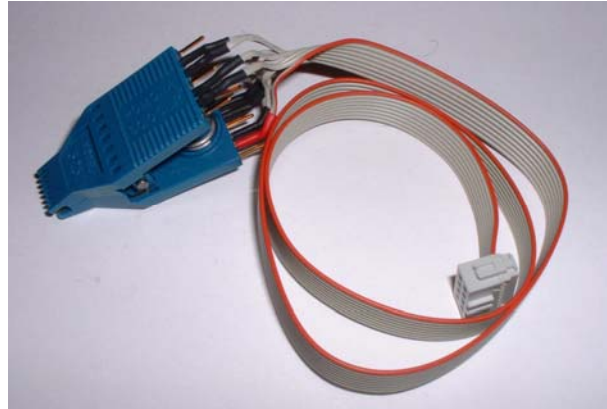
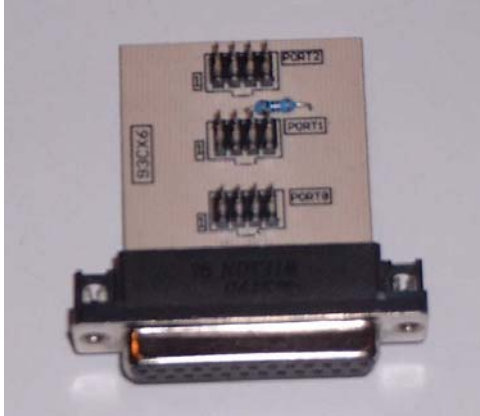


- Remove the cluster and open it.
- Look for the 14 pin chip VD202.
- Look for the silver chrystal and join its contacts.
- Connect the clip to port 1.
- Put the clip on the chip VD202.
- Select the menu [Volkswagen-Passat-VD202-Klammer](#)
- The Tacho Universal shows you the old value.
- Select the menu [Adjust KM](#)
- Enter the new value.
- Verify the new value with **OK**.

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## Model Passat VDO, Model 1993-1996

Use this board and clip:

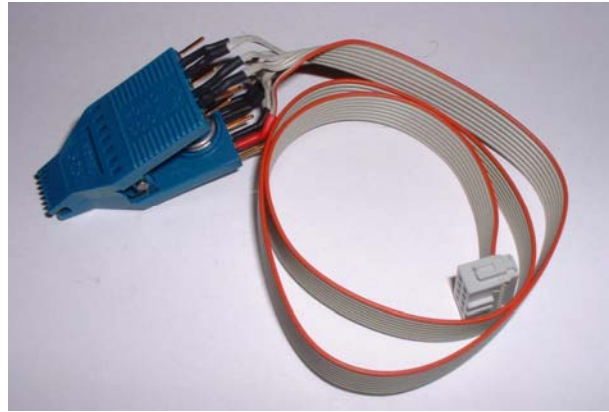
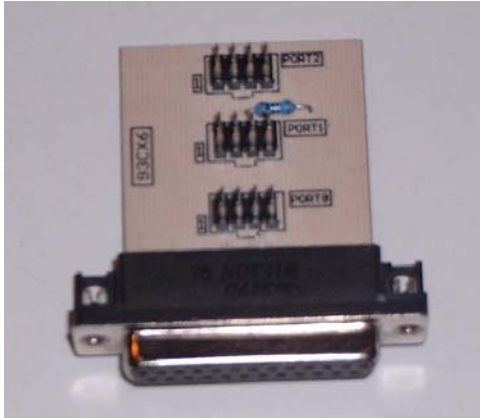


- Remove the cluster and open it.
- Look for the 14 pin chip 93C56.
- Look for the silver chrystal and join its contacts.
- Connect the clip to port 1.
- Put the clip on the chip 93C56.
- Select the menu [Volkswagen-Passat-VDO-Klammer](#)
- The Tacho Universal shows you the old value.
- Select the menu [Adjust KM.](#)
- Enter the new value.
- Verify the new value with [OK.](#)

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## Model Passat MotoMeter, Model 1993-1996

Use this board and clip:



- Remove the cluster and open it.
- Look for the 14 pin chip 93C56.
- Look for the silver chrystal and join its contacts.
- Connect the clip to port 1.
- Put the clip on the chip 93C56 .
- Select the menu [Volkswagen-Passat-MotoMeter-Klammer](#)
- The Tacho Universal shows you the old value.
- Select the menu [Adjust KM](#).
- Enter the new value.
- Verify the new value with [OK](#).

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## Model Passat MotoMeter, Software 1.3-1.8, Model 1993-1996

Use the Motometer-Plug:



- Remove the cluster.
- Connect the power plug with the instrument and press the 4 pin programming plug into the fitting hole:



- Connect the MotoMeter-Plug with the Tacho Universal.
- Select the menu **Volkswagen-Passat-MM SW 1.3-1.8-Diagnose**
- The Tacho Universal does not show you the old value.
- Enter the new value.
- Verify the new value with **OK**.



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## Model Passat MotoMeter, Model 1996-1997

Use the Motometer-Plug:



- Remove the cluster.
- Connect the power plug with the instrument and press the 4 pin programming plug into the fitting hole:



- Connect the MotoMeter-Plug with the Tacho Universal.
- Select the menu [Volkswagen-Passat-MM Passat-Diagnose](#)
- The Tacho Universal does not show you the old value.
- Enter the new value.
- Verify the new value with **OK**.

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## Model Passat B5 after 1997

Diagnostic programming

Use the OBD II - Plug:



The diagnostic port is under the handbrake

- Turn ignition on.
- Connect the Tacho Universal with the OBD II plug and the diagnostic port.
- Select the menu **Volkswagen-Passat-B5-Diagnose**
- The Tacho Universal shows you the old value.
- Enter the new value.
- Verify the new value with **OK**.
- For some versions you have to enter the old and the new value before you can program.

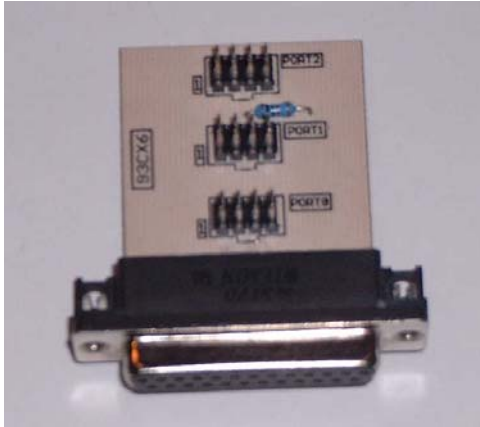
**Note:**

Passat modell 2000 also can have MotoMeter instruments. Use the menu **Volkswagen-Golf4-DiagnoseMM**

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## Model Passat B6

Use this board and clip:



- Remove the cluster and open it.
- Look for the 8 pin chip 93C86.
- Look for the silver chrystal and join its contacts.
- Connect the clip to Port 0.
- Put the clip on the chip 93C86 (red on pin 1).
- Select the menu **Volkswagen- Passat- B6**
- The Tacho Universal shows you the old value.
- Select the menu **Adjust KM.**
- Enter the new value.
- Verify the new value with **OK.**

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## Model T4 before 10/1998

Use the Motometer-Plug:



- Remove the cluster.
- Connect the power plug with the instrument and press the 4 pin programming plug into the fitting hole:



- Connect the MotoMeter-Plug with the Tacho Universal.
- Select the menu **Volkswagen-T4—T4 –10/98-Diagnose**
- The Tacho Universal does not show you the old value.
- Enter the new value.
- Verify the new value with **OK**.

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## Model T4 after 10/98

Diagnostic programming

Use the OBD II - Plug:



The diagnostic port is under the steering wheel

- Turn ignition on.
- Connect the Tacho Universal with the OBD II plug and the diagnostic port.
- Select the menu **Volkswagen-T4-T4 neu-Diagnose**
- The Tacho Universal shows you the old value.
- Enter the new value.
- Verify the new value with **OK**.

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## Model Sharan before 6/2000

Diagnostic programming

Use the OBD II -plug:



The diagnostic port is under the ashtray.

- Turn ignition on.
- Connect the Tacho Universal to the OBD II plug and the diagnostic port.
- Select the menu **Ford-Galaxy**
- Write down the old code.
- Set to 0. Now the display shows about 20 km.
- Now adjust the mileage.
- Now put back in the code you have written down.

Note:

If the display says **ERROR** repeat everything with a **different** value!

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## Model Sharan after 7/2000

Diagnostic programming

Use the following plugs:

OBD II



Audi A6 old



VW new



Connect those plugs together. If the VW new does not fit to the A6 old, you have to remove one of the pins in the A6 old plug. You can see which one it is, otherwise the plugs will not fit together. The A6 plug will still keep all functions!

The diagnostic port near your left knee when you sit on the driver's seat.

- Turn ignition on.
- Connect the Tacho Universal to the plug and the diagnostic port.
- Select the menu **VW-Sharan-Sharan 2000-Diagnose**
- The Tacho Universal shows you the old value.
- Enter the new value.
- Verify the new value with **OK**.

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## Model New Beetle

Diagnostic programming

Use the OBD II - Plug:



The diagnostic port near your left knee when you sit on the driver's seat.

- Turn ignition on.
- Connect the Tacho Universal with the OBD II-Plug and the diagnostic port.
- Select the menu **Volkswagen-New Beetle-New Beetle**
- The Tacho Universal shows you the old value.
- Enter the new value.
- Verify the new value with **OK**.

For some versions you have to enter the old and the new value before you can program.



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## Model New Beetle model 2000

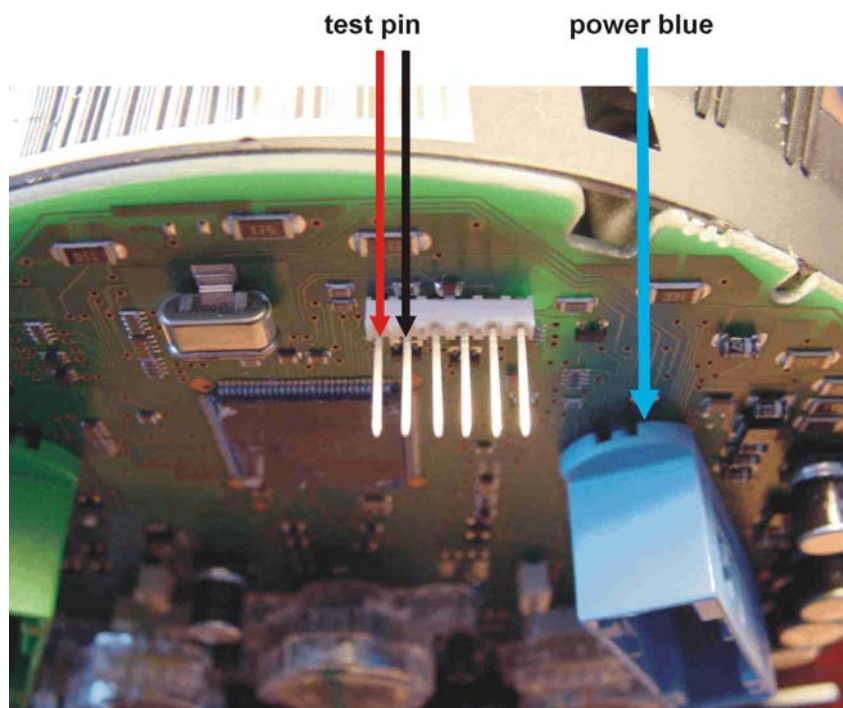
Use the Audi 2000 plug:



- Remove the cluster.
- Connect the plug like shown in the picture.

## New Beetle 2000

Audi 2000 plug



**There are 2 versions of this cluster. The correct mileage MUST be displayed. If the mileage is displayed ??????? do NOT program, try the other version!**

- 
- Select the menu **Volkswagen-New Beetle- Beetle 2000 V1 or Beetle 2000 V2**
  - The Tacho Universal shows you the old value. Only program if the value is correct. If not try the other version
  - Enter the new value.
  - Verify the new value with **OK**.

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## Model Lupo

Diagnostic programming

Use the OBD II - Plug:



The diagnostic port is behind a cover.

- Turn ignition on.
- Connect the Tacho Universal with the OBD II plug and the diagnostic port.
- Select the menu **Volkswagen-Lupo-Diagnose**
- The Tacho Universal shows you the old value.
- Enter the new value.
- Verify the new value with **OK**.

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## Model Polo after 1998

Diagnostic programming

Use the OBD II - Plug:



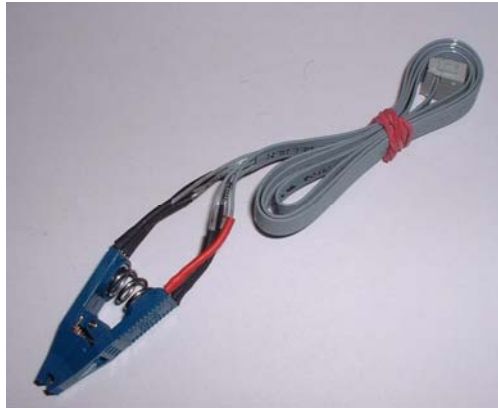
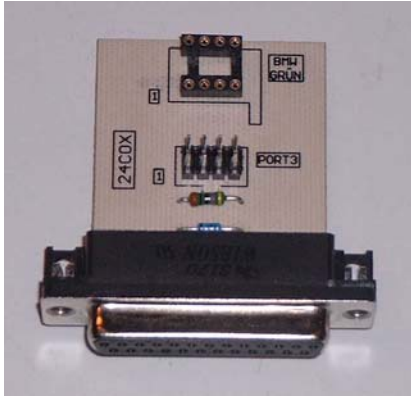
The diagnostic port is in the fuse-box

- Turn ignition on.
- Connect the Tacho Universal with the OBD II plug and the diagnostic port.
- Select the menu **Volkswagen-Polo Model 98-Diagnose**
- The Tacho Universal shows you the old value.
- Enter the new value.
- Verify the new value with **OK**.

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## Model Polo after 1998 TRW

Use this board and clip:



- Remove the cluster and open it (you have to remove the needles).
- Look for the 8 pin chip 24C04.
- Connect the clip to port 3.
- Put the clip on the chip 24C04 (red on pin 1).
- Select the menu **Volkswagen-Polo TRW**
- The Tacho Universal shows you the old value.
- Select the menu **Adjust KM.**
- Enter the new value.
- Verify the new value with **OK.**

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## Model LT VDO

Use the Sprinter VDO-Cluster plug:



- Remove the cluster.
- Connect the plug with the black port on the cluster.
- Select the menu **Mercedes-Sprinter-VDO-Diagnose**
- The Tacho Universal doesn't show you the old value.
- Enter the new value.
- Verify the new value with **OK**.

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## Model LT Kienzle

Use the Sprinter Kienzle-Plug:



- Remove the buttons at the bottom of the instrument.
- Remove the plastic cover.
- Now you see on the right side a small black cover that is protected with a red plastic button. You have to break and remove this red button to get access to the programming contacts.
- Connect the Kienzle-Plug with the programming contacts (red mark up) and the Tacho Universal.
- Turn ignition on and also power the Tacho Universal from the side!
- Select the menu **Mercedes-Sprinter-Kienzle-Diagnose**
- The Tacho Universal shows you the old value.
- Enter the new value.
- Verify the new value with **OK**.

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## Service display

Select the menu: Volkswagen-Service

model	channel	Original value	meaning
Polo / Lupo	10	150	Oilservice 15000km (Channel value / 100)
	11	300	Service 30000km (Channel value / 100)
	12	36	Service after Days (Channel value / 10)
-----	-----	-----	-----
Polo SW 17 / Golf 4	10	15	Oilservice 15000km (Channel value / 1000)
	11	30	Service 30000km (Channel value / 1000)
	12	36	Service after Days (Channel value / 10)
-----	-----	-----	-----
Sharan	5	15	Oilservice 15000 (Channel value / 1000)
	8	30	Service 30000km (Channel value / 1000)
-----	-----	-----	-----
VAG Model 2000	2	0	If the car has to be serviced, set 0 into channel 2
+	40	0	Last service was X km ago (Channel value/ 100)
Audi TT	41	0	Last service wasr X days ago(Channel value / 1)

**Note:**

Keep doors closed when programming the service display!

**Note:**

Before reading the channels, you will see some information about the instrument:

MM0 oder B00	:	Motometer
VDO	:	VDO
UN4	:	UKNSI
MM4 oder M73	:	Magneti Marelli
TRW	:	TRW