

LOCATING THE MOTRONIC (DME) UNIT:

The Motronic (DME) is an unpolished silver metal box approximately 18cm x 16cm x 4cm (6"x5"x2") labeled "MOTRONIC" either embossed or with a sticker. It is located under the driver's seat, remove the floor mat to locate it.

TOOLS NEEDED FOR REMOVAL:

Small Ratchet (socket wrench), Small Flat Head Screwdriver and a 10 mm socket with extension.

REMOVING THE MOTRONIC (DME) UNIT:

1. Slide the driver's seat back all the way back and up (if possible). Remove the floor mat.
2. Loosen the 4 nuts attached (10 mm).
3. Slide the Motronic slightly forward.
4. Remove the wiring harness connector by removing the retaining bracket (held in by a 10 mm washer and nut).
5. Remove the nuts and lift the unit off of the studs.
6. Hold the Motronic (DME) with one hand. Flip the steel retaining tab back that holds the connector.
7. Disconnect the box from the wiring plug by rotating the box out, away from the retaining tab.

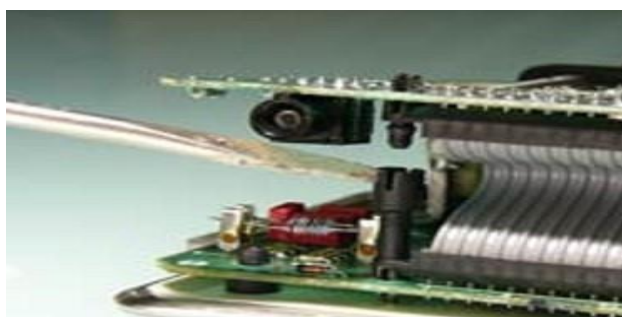
OPENING THE MOTRONIC (DME):

1. Using a Small Flat Head Screwdriver, straighten the 10 metal tabs on the back of the Motronic.



2. Remove the cover and the white plastic insulating sheet.
3. With your Small Flat Head Screwdriver, locate the male / female connector posts; refer to picture # 1 below. You will need to CAREFULLY unsnap the male side from the female side, the best way to do this is to place a small flathead screwdriver in the slit on the female post and gently pry up, while gently pulling the two boards apart. Force is needed so be sure to pull on the bracket between the plastic posts. Also, be careful not to flex and break the corners of the board, so firmly hold the middle of the board. NOTE: DO NOT TRY TO SEPARATE THE BOARDS COMPLETELY YET!!

Picture # 1

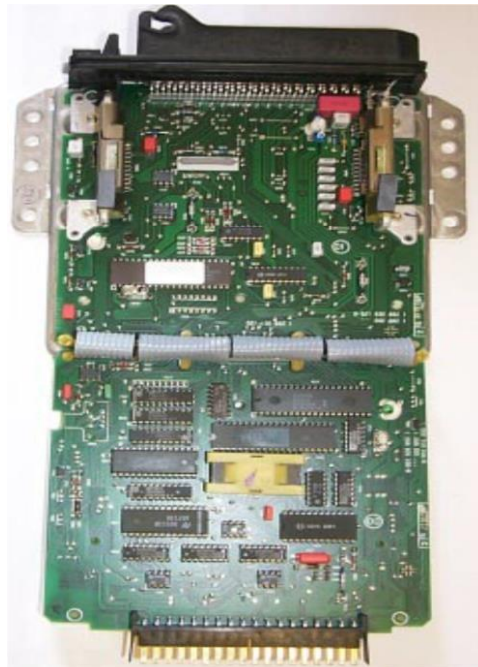


4. THIS IS A VERY IMPORTANT STEP AND IS THE MOST CRITICAL. Within the connector plug (with all the pins) you will see two plastic latches inside at each end, refer to picture # 2 below. These latches must be released. You need to insert the small flat head screw driver into the gap between the latch and the plug housing. Then bend the tab inwards while lifting the board up from the ribbon connector and repeat on the other side

Picture # 2



5. With the right and left latches released, use the screwdriver to press down gently on the upper board to free the board from the connector plug.
 6. Open the two boards like a book, ensuring that the ribbon cable is still intact. Refer to Picture # 3 below.
- Picture # 3



7. Locate the raised chip that has a yellow plastic retaining clip covering it. Refer to Picture # 4 below. Insert the small flathead screwdriver into one of the slots and pop it up. Do the same for the other side. Picture # 4



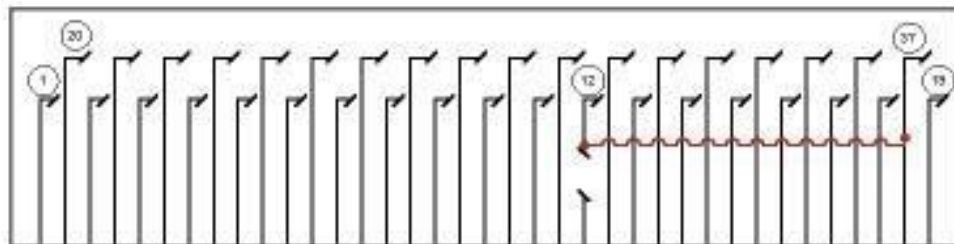
8. Note the installation position (notch in the chip's front). You must replace the FVD chip with the same orientation!! (Might be handy to take a picture with your phone 📷)

9. CAREFULLY slide a Small Flat Head Screwdriver under the chip and pry upwards, refer to Picture # 5 below. Alternate ends so that the prongs are not damaged. (MAKE SURE YOU ARE NOT PRYING UP THE CHIP SOCKET ITSELF!!) ATTENTION: EPROMS are static sensitive components!! Please avoid touching the Eprom pins (feet), so just hold the black chip body!! Place the chip on the metal cover to prevent static damage.

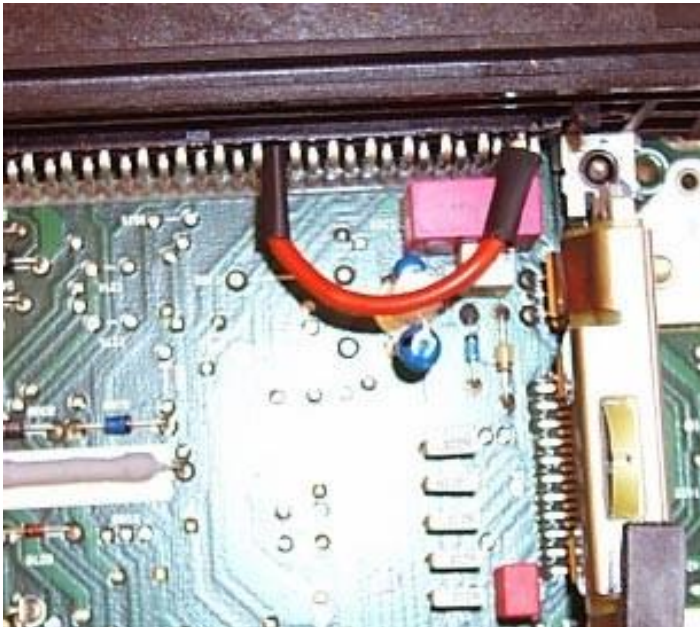
Picture # 5



10. Install the FVD Chip (sometimes we will send a chip with a coding socket – do not remove the socket, install with the socket) in the same orientation that the original chip was in (refer to your phone picture 📱). Gently push down on one row of pins (feet) then the other. Then press down fully to secure the chip. Double check that all of the pins are properly seated. 4. You must cut pin # 12 (shown below)



11. Bridge pin # 12 to pin # 37 and solder wire into place (shown below).



12. Reassemble in reverse order. Remember, when reconnecting the wiring plug, the plastic hook at the end of the connector is installed first.

13. Ensure that you have the proper O2 sensor hooked up per the table below. Table is in English and German.

14. Code the DME for the correct O2 sensor per the table below.

For any questions regarding the installation kindly contact us at:

FVD Germany +49-7665-9899-930 E-Mail: tuningfile@fvd.net

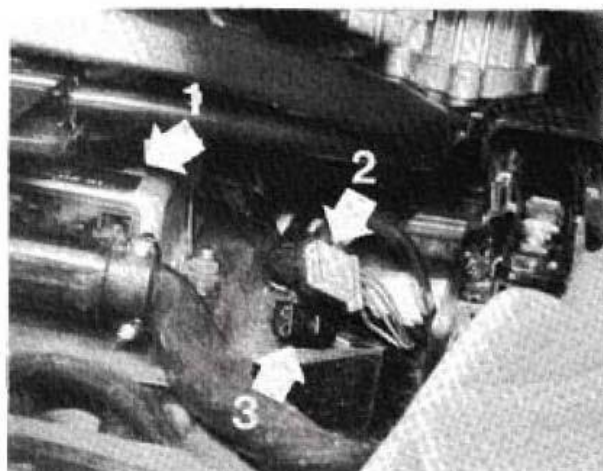
FVD USA +1-954-571-2050 E-Mail: tuningfile@fvd.net

We are available Mon-Fri 9:00 AM - 5:00 PM

Mit FVD LB2 Kit muss Lambdasonde angeschlossen sein und Steuergerät muss für Lambdasonde bzw. Katalysator kodiert sein (rot gekennzeichnete Kodierung).

Fahrzeug-Typ	Steuergeräte-Nr.	Länderausstattung	Kennfeldschalter 2-polig	Variantenschalter 3-polig	Lambdasonde	Bemerkung
911 Carrera 4 Modelljahr '89 (K)	911.618.124.00 Serie	alle mit Katalysator	--	--	965.606.126.01	
	911.618.124.00 Serie	J/Kalif.	--	928.607.421.00	965.606.126.01	
	911.618.124.00 Serie	alle ohne Kat.-M150	--	928.607.422.00		
	911.618.124.02 Serie	wie Steuergerät ..00	Kennfeld- und Variantenschalter wie Steuergerät ..00		965.606.126.01	ab 05/89
	911.618.124.04 Ers.	wie Steuergerät ..00/02	Kennfeld- und Variantenschalter wie Steuergerät ..00		965.606.126.01	
911 Carera 2/4 Modelljahr '90 (L)	911.618.124.01 Serie	M64.01, RdW mit Kataly.	--	--	965.606.126.01	Schaltgetriebe
	911.618.124.01 Serie	M64.01, J/USA (gesamt)	--	928.607.421.00	965.606.126.01	Schaltgetriebe
	911.618.124.01 Serie	M64.01, M150 - Weltweit	--	928.607.422.00		Schaltgetriebe
	911.618.124.01 Serie	M64.02, RdW mit Kataly.	964.612.253.00	--	965.606.126.01	Tiptronic-Getr.
	911.618.124.01 Serie	M64.02, J/USA (gesamt)	964.612.253.00	928.607.421.00	965.606.126.01	Tiptronic-Getr.
	911.618.124.01 Serie	M64.02, M150 - Weltweit	964.612.253.00	928.607.422.00		Tiptronic-Getr.
	911.618.124.03 Serie	wie Steuergerät ..01	Kennfeld- und Variantenschalter wie Steuergerät ..01		965.606.126.01	ab 02/90
	911.618.124.04 Serie/Ers.	wie Steuergerät ..01/03	Kennfeld- und Variantenschalter wie Steuergerät ..01		965.606.126.01	ab 03/90
911 Carrera 2/4 Modelljahr '91 (M)	964.618.124.00 Serie	M64.01 mit Katalysator nicht M114	--	--	965.606.126.01	Schaltgetriebe
	964.618.124.00 Serie	M64.01, ohne Kat.-M150	--	928.607.422.00		Schaltgetriebe
	964.618.124.00 Serie	M64.02 mit Katalysator, nicht M114	964.612.253.00	--	965.606.126.01	Tiptronic-Getr.
	964.618.124.00 Serie	M64.02 ohne Kat.-M150	964.612.253.00	928.607.422.00		Tiptronic-Getr.
	964.618.124.02 Serie	wie Steuergerät ..00	Kennfeld- und Variantenschalter wie Steuergerät ..00			ab 03/90
	964.618.124.03 Ers.	wie Steuergerät ..00/02	Kennfeld- und Variantenschalter wie Steuergerät ..00/02		965.606.126.01	
	964.618.124.01 Serie	M114 (Taiwan-Ausführung)	Kennfeld- und Variantenschalter wie Steuergerät ..00			
	964.618.124.04 Ers.	M114 (Taiwan-Ausführung)	Kennfeld- und Variantenschalter wie Steuergerät ..00		965.606.126.01	
911 Carrera 2/4 Modelljahr '92 (N) / '93 (P)	964.618.124.03 Serie u. Ers.	M64.01 mit Katalysator nicht USA C2 u. M114	--	--	965.606.126.01	Schaltgetriebe
	964.618.124.03 Serie u. Ers.	M64.02 mit Katalysator nicht USA C2 u. M114	964.612.253.00	--	965.606.126.01	Tiptronic-Getr.
	964.618.124.03 Serie/Ers.	M64.01 - USA C2	--	928.607.421.00	965.606.126.01	Schaltgetriebe
	964.618.124.03 Serie/Ers.	M64.02 - USA C2	964.612.253.00	928.607.421.00	965.606.126.01	Tiptronic-Getr.
	964.618.124.03 Serie/Ers.	M64.01 ohne Kat.-M150	--	928.607.422.00		Schaltgetriebe
	964.618.124.03 Serie/Ers.	M64.02 ohne Kat.-M150	964.612.253.00	928.607.422.00		Tiptronic-Getr.
	964.618.124.01 Serie	M114 (Taiwan-Ausführung) und Carrera RS mit Kat.	--	--	965.606.126.01	
	964.618.124.04 Serie/Ers.	M114 (Taiwan-Ausführung) und Carrera RS mit Kat.	--	--	965.606.126.01	ab 11/91
	964.618.124.04 Serie/Ers.	Carrera RS ohne Kat.-M150	--	928.607.422.00		

- **DME-Steuergerät (1)** auf Katalysator-Betrieb kodieren. Dazu den linken Sitz nach oben und hinten in Stellung bringen. Adapterstecker an der 3-poligen Kabelausbindung (Variantenschalter, **2**) am DME-Kabelstrang entfernen. Beim Katalysatorbetrieb müssen bei RdW-Fahrzeugen beide Kabelausbindungen (2 und 3) am DME-Kabelstrang ohne Adapterstecker sein.



FVD LB2 / Mass Air Kit requires the use of the O2 sensor and that you code the DME for O2 sensor / catalytic (red marked option).

Vehicle type	Control unit no.	Country equipment	Map switch 2-pin	Version switch 3-pin	Oxygen sensor	Note
911 Carrera 4 model year 89 (K)	911.618.124.00 Standard	all with cat. converter	--	--	965.606.126.01	
	911.618.124.00 Standard	J/Calif.	--	928.607.421.00	965.606.126.01	
	911.618.124.00 Standard	all without cat. conv.-M150	--	928.607.422.00		
	911.618.124.02 Standard	as control unit ..00	Map and versions switches as control unit ..00		965.606.126.01	as of 05/89
	911.618.124.04 part	as control unit ..00/02	Map and versions switches as control unit ..00		965.606.126.01	
911 Carera 2/4 model year 90 (L)	911.618.124.01 Standard	M64.01, RoW with cat. conv.	--	--	965.606.126.01	Man. transm.
	911.618.124.01 Standard	M64.01, J/USA (complete)	--	928.607.421.00	965.606.126.01	Man. transm.
	911.618.124.01 Standard	M64.01, M150 - worldwide	--	928.607.422.00		Man. transm.
	911.618.124.01 Standard	M64.02, RoW with cat. conv.	964.612.253.00	--	965.606.126.01	Tiptronic transm.
	911.618.124.01 Standard	M64.02, J/USA (complete)	964.612.253.00	928.607.421.00	965.606.126.01	Tiptronic transm.
	911.618.124.01 Standard	M64.02, M150 - worldwide	964.612.253.00	928.607.422.00		Tiptronic transm.
	911.618.124.03 Standard	as control unit ..01	Map and versions switches as control unit ..01		965.606.126.01	as of 02/90
	911.618.124.04 Standard/SP	as control unit ..01/03	Map and versions switches as control unit ..01		965.606.126.01	as of 03/90
911 Carrera 2/4 model year '91 (M)	964.618.124.00 Standard	M64.01 with cat. converter not M114	--	--	965.606.126.01	Man. transm.
	964.618.124.00 Standard	M64.01, w/o cat. conv.-M150	--	928.607.422.00		Man. transm.
	964.618.124.00 Standard	M64.02 with cat. converter, not M114	964.612.253.00	--	965.606.126.01	Tiptronic transm.
	964.618.124.00 Standard	M64.02 w/o cat conv.-M150	964.612.253.00	928.607.422.00		Tiptronic transm.
	964.618.124.02 Standard	as control unit ..00	Coding + adapter plugs as control unit ..00			as of 03/90
	964.618.124.03 Spare part	as control unit ..00/02	Coding + adapter plugs as control unit ..00/02		965.606.126.01	
	964.618.124.01 Standard	M114 (Taiwan version)	Coding + adapter plugs as control unit ..00			
911 Carrera 2/4 model year '92 (N) / '93 (P)	964.618.124.03 Standard & spare part	M64.01 with cat. converter not USA C2 & M114	--	--	965.606.126.01	Man. transm.
	964.618.124.03 Standard & spare part	M64.02 with cat. converter not USA C2 & M114	964.612.253.00	--	965.606.126.01	Tiptronic transm.
	964.618.124.03 Standard/SP	M64.01 - USA C2	--	928.607.421.00	965.606.126.01	Man. transm.
	964.618.124.03 Standard/SP	M64.02 - USA C2	964.612.253.00	928.607.421.00	965.606.126.01	Tiptronic transm.
	964.618.124.03 Standard/SP	M64.01 w/o cat. conv.-M150	--	928.607.422.00		Man. transm.
	964.618.124.03 Standard/SP	M64.02 w/o cat. conv.-M150	964.612.253.00	928.607.422.00		Tiptronic transm.
	964.618.124.01 Standard	M114 (Taiwan version) and Carrera RS with cat. conv.	--	--	965.606.126.01	
	964.618.124.04 Standard/SP	M114 (Taiwan version) and Carrera RS with cat. conv.	--	--	965.606.126.01	as of 11/91
	964.618.124.04 Standard/SP	Carrera RS w/o cat. conv.-M150	--	928.607.422.00		

- Code **DME control unit (1)** for catalytic converter operation. This requires lifting and moving back the left seat. Remove adapter plug on 3-pin lead connection (version switch, 2) on the DME wire harness. Both lead connections (2 and 3) on the DME wire harness of Rest of World cars must be without adapter plugs when converted to catalytic converter operation.

