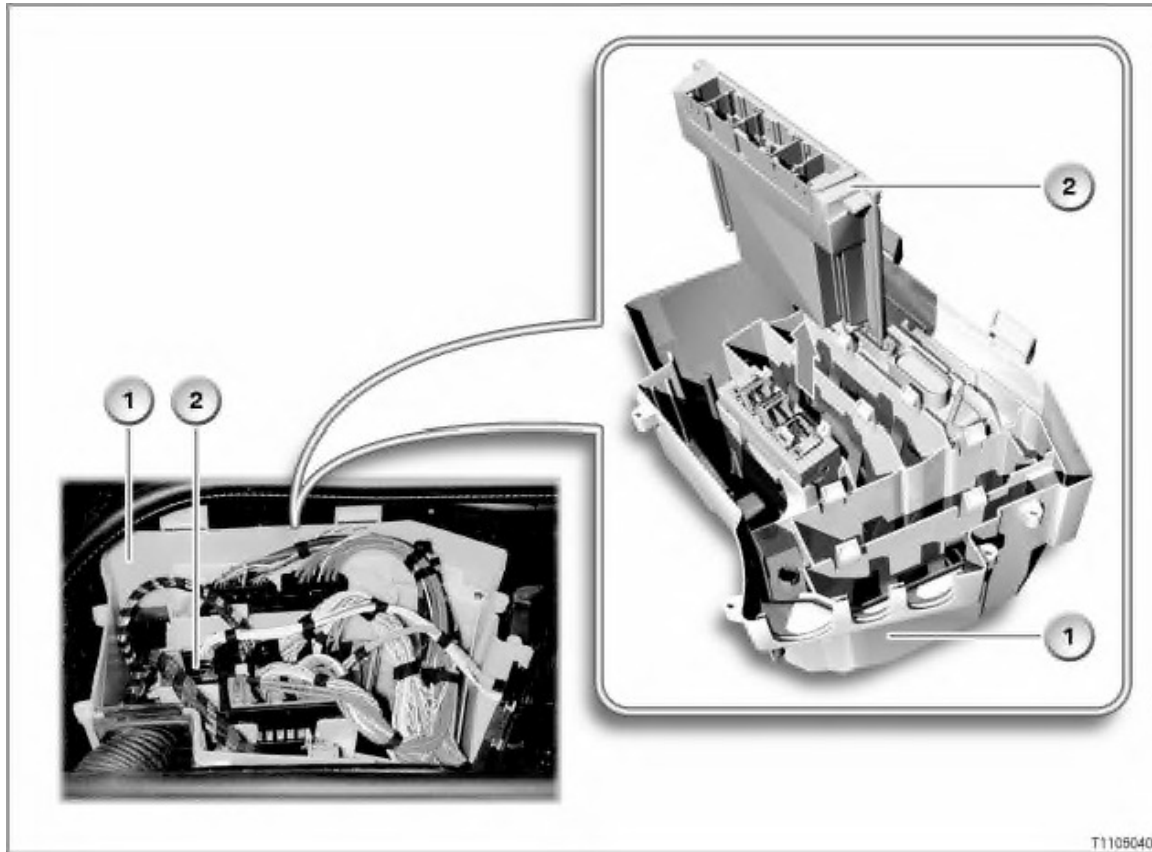


Installation location

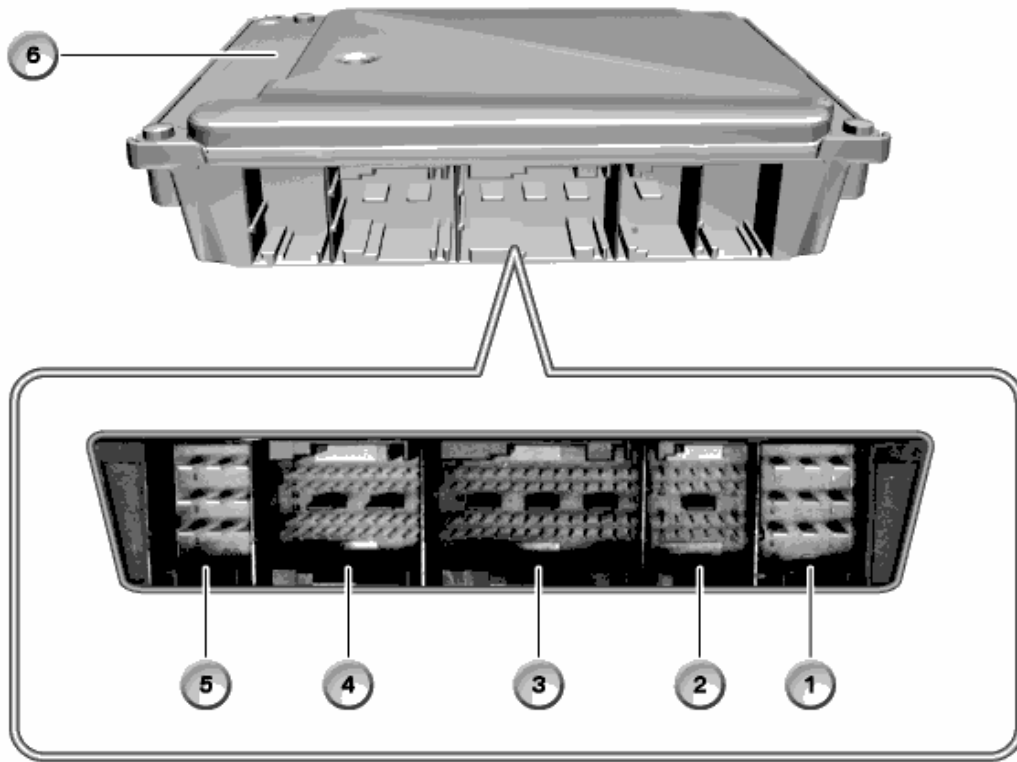
The DME control unit is located in the electronics box on the bulkhead (illustration shows E65).



Item	Description	Item	Description
1	Electronics box	2	DME control module

Construction

The engine wiring harness and vehicle wiring harness are connected to the DME control unit via 5 separate connectors.



T1105042

Item	Description	Item	Description
1	Connector X60001	2	Connector X60002
3	Connector X60003	4	Connector X60004
5	Connector X60005	6	DME control module

- Pin assignments

Pin assignment for connector X60001, 9-pin

Pin	Type	Description
1	---	---
2	---	---
3	A	Engine speed signal to electronic transmission control fed through integrated supply module (TxD wire) > not E70
4	M	Terminal 31, earth
5	---	---
6	M	Terminal 31, earth
7	V	Terminal 30 from integrated supply module, power supply > E70 Terminal 30 from front power distributor in the junction box
8	V	Terminal 87 from integrated supply module, power supply > E70 Terminal 87 from front power distributor in the junction box
9	E	> E70 Terminal 30 for switching the DME main relay

A = Output

M = Earth
V = Power supply
For current specifications regarding pin assignments, please refer to BMW diagnosis system

Pin assignment for connector X60002, 24-pin

Pin	Type	Description
1	A	Oxygen sensor heating for oxygen sensor upstream of catalytic converter
2	A	Oxygen sensor heating for oxygen sensor 2 upstream of catalytic converter
3	---	---
4	---	---
5	---	---
6	A	Oxygen sensor heating for oxygen sensor downstream of catalytic converter
7	A	Signal to oxygen sensor upstream of catalytic converter
8	A	Signal to oxygen sensor 2 downstream of catalytic converter
9	A	Signal to oxygen sensor 2 upstream of catalytic converter
10	A	Signal to oxygen sensor downstream of catalytic converter
11	---	---
12	A	Oxygen sensor heating for oxygen sensor 2 downstream of catalytic converter
13	A	Signal to oxygen sensor upstream of catalytic converter
14	E	Signal from oxygen sensor 2 downstream of catalytic converter
15	E	Signal to oxygen sensor 2 upstream of catalytic converter
16	E	Signal from oxygen sensor downstream of catalytic converter
17	---	---
18	---	---
19	E	Signal from oxygen sensor upstream of catalytic converter
20	E	Signal from oxygen sensor upstream of catalytic converter
21	E	Signal from oxygen sensor 2 upstream of catalytic converter
22	E	Signal from oxygen sensor 2 upstream of catalytic converter
23	E	Terminal 85 from integrated supply module, power supply > not E70
24	---	---

A = Output
E = Input
E/A = Input and output
For current specifications regarding pin assignments, please refer to BMW diagnosis system

Pin assignment for connector X60003, 52-pin

Pin	Type	Description
1	---	---
2	E	Signal from inlet pipe pressure sensor
3	E	Signal from intake air temperature sensor in hot-film air-mass sensor
4	A	Power supply for intake pipe pressure sensor

5	E	Signal from hot-film air-mass sensor
6	A	Actuation of fuel injector for cylinder 4
7	A	Actuation of fuel injector for cylinder 5
8	A	Actuation of fuel injector for cylinder 6
9	A	Actuation of VANOS solenoid valve 2 - inlet
10	A	Actuation of VANOS solenoid valve - inlet
11	A	Actuation of fuel injector for cylinder 7
12	A	Actuation of mapped thermostat
13	A	Actuation of fuel injector for cylinder 1
14	A	Earth wire to hot-film air mass meter, intake manifold pressure sensor and coolant temperature sensor
15	---	---
16	E	Signal from exhaust camshaft sensor
17	E	Signal from exhaust camshaft sensor 2
18	A	Signal wire to Valvetronic control unit
19	E/A	Bitserial data interface to alternator and oil condition sensor > E60, E61, E63, E64 and E70 Bitserial data interface to alternator, oil condition sensor and intelligent battery sensor
20	A	Actuation of VANOS solenoid valve - exhaust
21	A	Actuation of fuel evaporation control valve
22	---	---
23	A	Actuation of VANOS solenoid valve 2 - exhaust
24	A	Actuation of fuel injector for cylinder 2
25	A	Actuation of fuel injector for cylinder 8
26	A	Actuation of fuel injector for cylinder 3
27	E	Signal from crankshaft sensor
28	E	Signal from coolant-temperature sensor
29	E	Signal from inlet camshaft sensor
30	E	Signal from inlet camshaft sensor 2
31	E	Signal from throttle-valve actuator (potentiometer 1)
32	A	Signal from throttle-valve actuator (potentiometer 2)
33	A	Signal to knock sensor
34	A	Signal to knock sensor 2
35	A	Signal to knock sensor 3
36	A	Signal to knock sensor 4
37	A	Earth wire to crankshaft sensor
38	E/A	Local CAN (High) between DME control unit and Valvetronic control unit
39	---	---
40	A	Actuation of DISA servomotor and DISA servomotor 2

41	A	Actuation of DISA servomotor and DISA servomotor 2
42	A	Actuation of throttle-valve actuator
43	A	Actuation of throttle-valve actuator
44	A	Reference voltage to air-mass flow sensor
45	---	---
46	E	Signal from knock sensor
47	E	Signal from knock sensor 2
48	E	Signal from knock sensor 3
49	E	Signal from knock sensor 4
50	A	Power supply to throttle-valve actuator
51	E/A	Local CAN (Low) between DME control unit and Valvetronic control unit
52	A	Earth wire to throttle-valve actuator
	A = Output E = Input E/A = Input and output For current specifications regarding pin assignments, please refer to BMW diagnosis system	

Pin assignment for connector X60004, 40-pin

Pin	Type	Description
1	---	---
2	A	US version: Signal for heating to diagnosis module for tank leakage
3	---	---
4	A	Signal to electric fan
5	M	Terminal 31, earth
6	E	Terminal 50E from CAS control unit > not E70
7	A	Earth wire to accelerator pedal module
8	E	Signal from accelerator pedal module
9	A	Power supply to accelerator pedal module
10	A	> E60, E61, E63, E64 and E70 Actuation of fuel-pump relay
11	---	---
12	A	Earth wire to accelerator pedal module
13	E	Signal from accelerator pedal module
14	A	Power supply to accelerator pedal module
15	---	---
16	---	---
17	A	Engine-speed signal to diagnosis socket > not E70
18	A	Actuation of exhaust flap > not E70
19	A	Actuation of electronics box fan

20	A	US version: Actuation of leakage diagnosis pump
21	---	---
22	E	Engine-speed signal from DSC control unit
23	E	Signal from clutch module
24	E	Signal from brake light switch
25	A	Signal from oil pressure switch via integrated supply module > E70 Signal from oil pressure switch
26	E	Terminal 15 wake-up wire
27	---	---
28	E	Signal from brake light test switch
29	---	---
30	E	US version: Signal from leakage diagnosis pump
31	A	Signal for active air flap control (introduction from 03/2007 on E60, E61)
32	---	---
33	A	EWS signal to CAS control unit
34	---	---
35	---	---
36	E/A	PT-CAN High
37	E/A	PT-CAN Low
38	A	Earth wire to temperature sensor at radiator outlet
39	E	Signal from temperature sensor on radiator outlet
40	A	Actuation of starter inhibitor relay in integrated supply module > E70 Engine start signal from CAS
	A = Output E = Input E/A = Input and output M = Earth For current specifications regarding pin assignments, please refer to BMW diagnosis system	

Pin assignment for connector X60005, 9-pin

Pin	Type	Description
1	A	Actuation of no. 3 cylinder ignition coil
2	A	Actuation of no. 4 cylinder ignition coil
3	A	Actuation of no. 1 cylinder ignition coil
4	A	Actuation of no. 7 cylinder ignition coil
5	M	Ignition earth
6	A	Actuation of no. 8 cylinder ignition coil
7	A	Actuation of no. 2 cylinder ignition coil
8	A	Actuation of no. 6 cylinder ignition coil

A = Output

M = Earth

For current specifications regarding pin assignments, please refer to BMW diagnosis system