

Motronic ME7.2 – BMW M62TUB35, M62TUB44

The BMW M62 is a V8 DOHC piston engine which was produced from 1999 to 2004 with ME7.2. It was used in E38, E39, X5.

For example ECU: Bosch – 0261207106 , 0261204620

Ver 1 – Electric Pedal (ETC) pinout for ME7.2 M62TU

Pin-nr on ECU (X60004)	Function	Connects to Pedal
Pin 1	Battery charge indicator lamp signal	No
Pin 7	Electronic pedal ground	Pedal pin 4 (Brown)
Pin 8	Electronic pedal signal	Pedal pin 5 (Gray)
Pin 9	voltage supply for pedal	Pedal pin 2 (Pink)
Pin 10	Ground signal to activate fuel pump relay	No
Pin 11	oil pressure warning light	No
Pin 12	Ground pedal sensor	Pedal pin 8 (Yellow)
Pin 13	signal pedal sensor	Pedal pin 1 (White)
Pin 14	voltage supply for pedal	Pedal pin 6 (Green)
Pin 17	RPM signal to Tacho	No
Pin 26	switched +12 from ignition switch	No
Pin 32	K-line diagnostic bus to pin 7 of OBD2 connector to be able to use OBD2	No

Ver 2 – Electric Pedal (ETC) pinout for ME7.2 M62TU

Pin-nr on ECU (X60004)	Function	Connects to Pedal
Pin 1	Battery charge indicator lamp signal	No
Pin 7	Electronic pedal ground	Pedal pin 1
Pin 8	Electronic pedal signal	Pedal pin 4
Pin 9	voltage supply for pedal	Pedal pin 5
Pin 10	Ground signal to activate fuel pump relay	No
Pin 11	oil pressure warning light	No
Pin 12	Ground pedal sensor	Pedal pin 2
Pin 13	signal pedal sensor	Pedal pin 6
Pin 14	voltage supply for pedal	Pedal pin 3
Pin 17	RPM signal to Tacho	No
Pin 26	switched +12 from ignition switch	No
Pin 32	K-line diagnostic bus to pin 7 of OBD2 connector to be able to use OBD2	No

ECU Plug connector overview

Number	X-pin, colour	Description
X60001	9-pin, black	Plug connector DME control unit Module 1
X60002	24-pin, black	Plug connector DME control unit Module 2
X60003	52-pin, black	Plug connector DME control unit Module 3
X60004	40-pin, black	Plug connector DME control unit Module 4
X60005	9-pin, black	Plug connector DME control unit Module 5

Pin assignments at plug connector X60001

Pin	Type	Description / Signal type	Connection / Measuring notes
1		Not used	
2		Not used	
3		Not used	
4	M	Ground	Ground point left-hand drive Ground connector X6460
5	M	Ground	Ground point left-hand drive Ground connector X6460
6	M	Ground	Ground point left-hand drive Ground connector X6460
7	E	Voltage supply terminal 30	Fuse F4
8	E	Terminal 87	Fuse F1
9		Not used	

Pin assignments at plug connector X60002

Pin	Type	Description / Signal type	Connection / Measuring notes
1	M	Oxygen sensor ground	Heated oxygen sensor 2 behind catalytic converter
2	E	Reversing light signal	Reversing light switch
3	E/A	CAN-bus low	AGS transmission control unit
4	E/A	CAN-bus high	AGS transmission control unit
5		Not used	
6		Not used	
7	M	Oxygen sensor ground	Heated oxygen sensor 1 behind catalytic converter
8	M	Oxygen sensor ground	Heated oxygen sensor 2 behind catalytic converter
9	M	Oxygen sensor ground	Heated oxygen sensor 1 in front of catalytic converter

10	M	Oxygen sensor ground	Heated oxygen sensor 2 in front of catalytic converter
11	M	Oxygen sensor ground	Heated oxygen sensor 1 behind catalytic converter
12		Not used	
13	M	Oxygen sensor ground	Heated oxygen sensor 2 in front of catalytic converter
14	E	Oxygen sensor signal	Heated oxygen sensor 2 behind catalytic converter
15	E	Oxygen sensor signal	Heated oxygen sensor 1 in front of catalytic converter
16	E	Oxygen sensor signal	Heated oxygen sensor 2 in front of catalytic converter
17	E	Oxygen sensor signal	Heated oxygen sensor 1 behind catalytic converter
18		Not used	
19	M	Oxygen sensor ground	Heated oxygen sensor 1 in front of catalytic converter

20		Not used	
21		Not used	
22		Not used	
23	A	Activation terminal 85	DME relay
24		Not used	

Pin assignments at plug connector X60003

Pin	Type	Description / Signal type	Connection / Measuring notes
1	A	Injection signal	Fuel injector 2
2	A	Injection signal	Fuel injector 3
3	A	Signal Tank ventilation valve	Charcoal filter valve
4	A	Temperature signal, E-box fan	Fan, E-box

5		Not used	
6	M	Electronic ground	Ground point left-hand drive Ground connector X6460
7	A	Voltage supply for hot-film air mass meter (LMM2)	Hot-film air mass meter
8	E	Signal Electric throttle actuator	Electric throttle actuator
9	M	Ground, hot-film air mass meter	Hot-film air mass meter
10	A	Multimeter Electric throttle actuator	Electric throttle actuator
11		Not used	
12	E	Voltage signal, terminal 30h	Starter
13	E	Signal, alternator D+ (terminal 61)	Alternator
14	A	Injection signal	Fuel injector 7
15	A	Injection signal	Fuel injector 6

16	E	Signal, VANOS valve	VANOS valve, cylinders 5-8
17		Not used	
18		Not used	
19		Not used	
20	E	Signal, camshaft sensor	Hall-effect sensor, camshaft 2
21	M	Ground	Dual temperature sensor
22	E	Signal, coolant temperature	Dual temperature sensor
23	E	Signal, hot-film air mass meter	Hot-film air mass meter
24	E	Signal Electric throttle actuator	Electric throttle actuator
25	E	Ground Electric throttle actuator	Electric throttle actuator
26		Not used	

27	A	Injection signal	Fuel injector 8
28	A	Injection signal	Fuel injector 5
29	E	Signal, VANOS valve	VANOS valve, cylinders 1-4
30		Not used	
31	A	Signal, cooling characteristic map	Characteristic map, cooling
32	E	Signal, crankshaft sensor	Crankshaft sensor
33		Not used	
34	E	Signal, hot-film air mass meter	Hot-film air mass meter
35	M	Shield, knock sensor	Knock sensor
36	E	Sensor 2 signal	Knock sensor
37	E	Signal, sensor 4	Knock sensor

38	M	Shield, knock sensor	Knock sensor
39	E	Oil level – thermal	Oil level sensor
40	A	Injection signal	Fuel injector 4
41	A	Injection signal	Fuel injector 1
42	E	Signal Electric throttle actuator	Electric throttle actuator
43	E	Signal Electric throttle actuator	Electric throttle actuator
44		Not used	
45	M	Ground	Shield, crankshaft sensor
46	E	Signal, crankshaft sensor	Crankshaft sensor
47		Not used	
48	M	Shield, knock sensor	Knock sensor

49	E	Sensor 1 signal	Knock sensor
50	E	Sensor 3 signal	Knock sensor
51	M	Shield, knock sensor	Knock sensor
52	E	Signal, secondary air pump valve	Secondary air pump valve

Pin assignments at plug connector X60004

Pin	Type	Description / Signal type	Connection / Measuring notes
1	A	Battery charge indicator lamp signal (terminal 61)	Instrument cluster
2	A	Voltage signal, terminal 30h	Integrated electronic control unit (IKE)
3	A	Activation, secondary air pump relay	Secondary air pump relay
4	E	Signal Electric fan	Electric fan
5		Not used	

6	E	Start signal terminal 50	Ignition switch
7	M	Ground Pedal position sensor	Pedal position sensor
8	E	Signal Pedal position sensor	Pedal position sensor
9	A	Supply Pedal position sensor	Pedal position sensor
10	A	Activation, fuel pump relay (EKP)	EKP relay
11	A	Oil pressure indicator lamp	Instrument cluster
12	M	Ground Pedal position sensor	Pedal position sensor
13	E	Signal Pedal position sensor	Pedal position sensor
14	A	Supply Pedal position sensor	Pedal position sensor
15		Not used	
16		Not used	

17	A	Engine speed signal output (TD)	OBDII socket
18	M	Negative activation for heating	Diagnostic module, fuel tank leakage (for USA only)
19	E	Signal Reversing light	Integrated electronic control unit (IKE)
20	A	N457 VICS receiver	Diagnostic module, fuel tank leakage (for USA only)
21	A	Signal Oil level sensor	Light module
22	E	Rear right speed signal	ABS/DSC control unit
23	E	Signal Clutch switch	Clutch switch RHD Clutch switch module LHD
24	E	Brake light switch signal	Brake light switch
25		Not used	
26	E	Voltage supply, terminal 15	Fuse F14
27	E	Data link MFL	Coil spring

28	E	Brake light test signal	Brake light switch
29	E	A/C compressor signal	Heating and A/C control module
30	A	X01040 Intermediate connector, GPS antenna	Diagnostic module, fuel tank leakage (for USA only)
31		Not used	
32	A	Diagnosis signal TXD	OBDII socket
33	E/A	Communication link (EWS)	Electronic immobilizer control unit (EWS)
34		Not used	
35		Not used	
36	E/A	CAN-bus high	CAN link
37	E/A	CAN-bus low	CAN link
38	M	Ground	Coolant outlet temperature sensor

39	E	Signal	Coolant outlet temperature sensor
40	A	Start signal	Start relay

Pin assignments at plug connector X60005

Pin	Type	Description / Signal type	Connection / Measuring notes
1	A	Suignal, terminal 1	Ignition coil 7
2	A	Suignal, terminal 1	Ignition coil 8
3	A	Suignal, terminal 1	Ignition coil 2
4	A	Suignal, terminal 1	Ignition coil 3
5	M	Ground	Ground point
6	A	Suignal, terminal 1	Ignition coil 1
7	A	Suignal, terminal 1	Ignition coil 4
8	A	Suignal, terminal 1	Ignition coil 5

9	A	Suignal, terminal 1	Ignition coil 6