

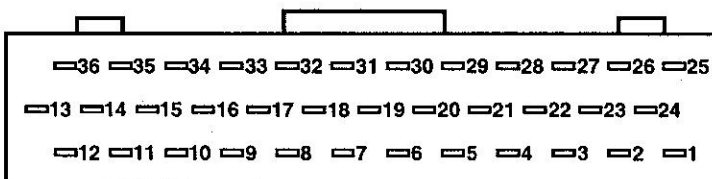
ROVER

Rover MEMS MPi

Model:	Engine code:	Year:
111i/114i/214i	K8/14K8	1996-98
214 16V	14K16	1995-98
216 Cabrio/Coupe/416 Tourer	K16	1996-99
414i/416i	K16	1995-98
420i	T16	1995-98
MGF 1,8i	K16	1995-99

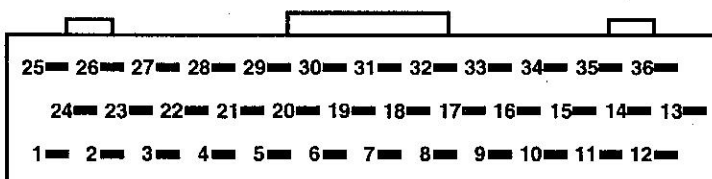
ECM harness multi-plug

Terminal side



AD73893

Wire side



AD42080

Component/circuit description	ECM pin	Signal	Condition	Typical value
Air conditioning	5	→		1
	15	←		1
	35	←		1
Air conditioning – if fitted	19	→		1
Crankshaft position (CKP) sensor	31 (32)	←	Engine running	Ww 21
	32 (31)	←	Engine running	Ww 21
Cruise control system relay – except 1,8 – if fitted	26			1
Data link connector (DLC)	10	↔		1
Earth	29		Ignition ON	0 V
Engine bay air temperature sensor – 1,8	34	←		1
Engine bay blower motor – 1,8	26	→		1
Engine bay temperature warning lamp – 1,8	17	→		1
Engine coolant temperature (ECT) sensor	30	↔	Ignition ON	0 V
	33	←	Ignition ON – coolant temp. 10°C	2,8 V
	33	←	Ignition ON – coolant temp. 80°C	0,5 V
Evaporative emission (EVAP) canister purge valve	21	↔	Ignition OFF	0 V after 5 minutes
	21	↔	Ignition ON	11-14 V
	21	↔	Engine running	1-99%
	21	↔	Engine running	Ww 20
Fuel temperature sensor – 2,0	30	↔	Ignition ON	0 V
	34	←	Ignition ON – fuel temp. 10°C	3,1 V
Heated oxygen sensor (HO2S)	7	←	Engine idling – accelerate briefly	0-1 V fluctuating
	7	←	Engine idling	Ww 21
	18	↔	Ignition ON	0 V

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
Component/circuit description	ECM pin	Signal	Condition	Typical value
Idle speed control (ISC) actuator*	2	⇒	Ignition ON	11-14 V
	2	⇒	Engine idling	Intermittent Wym 30
	3	⇒	Ignition ON	11-14 V
	3	⇒	Engine idling	Intermittent Wym 30
	22	⇒	Ignition ON	11-14 V
	22	⇒	Engine idling	Intermittent Wym 30
	27	⇒	Ignition ON	11-14 V
	27	⇒	Engine idling	Intermittent Wym 30
Ignition coil	25	⇋	Ignition OFF	0 V after 5 minutes
	25	⇋	Ignition ON	11-14 V
	25	⇋	Engine running	Wym 33
Ignition coil – 2,0	1	⇋	Ignition OFF	0 V after 5 minutes
	1	⇋	Ignition ON	11-14 V
	1	⇋	Engine running	Wym 33
Ignition switch	11	←	Ignition OFF	0 V
	11	←	Ignition ON	11-14 V
Immobilizer control module	13	←	Engine running	Wym 34
Injectors 1 & 4	24	⇋	Ignition OFF	0 V after 5 minutes
	24	⇋	Ignition ON	11-14 V
	24	⇋	Engine idling	Wym 35
Injectors 1 & 4 – 2,0	24	⇋	Engine idling	2,1 ms
Injectors 1 & 4 – except 2,0	24	⇋	Engine idling	3,3 ms
Injectors 2 & 3	23	⇋	Ignition OFF	0 V after 5 minutes
	23	⇋	Ignition ON	11-14 V
	23	⇋	Engine idling	Wym 35
Injectors 2 & 3 – 2,0	23	⇋	Engine idling	2,1 ms
Injectors 2 & 3 – except 2,0	23	⇋	Engine idling	3,3 ms
Intake air temperature (IAT) sensor	16	←	Ignition ON – air temp. 10°C	2,8 V
	30	⇋	Ignition ON	0 V
Knock sensor (KS) – 2,0	17	←	Engine idling – accelerate briefly	Wym 38
	30	⇋	Ignition ON	0 V
Oxygen sensor heater relay	36	⇋	Ignition OFF	0 V after 5 minutes
	36	⇋	Ignition ON	11-14 V
	36	⇋	Engine idling	0-1 V
Park/neutral position (PNP) switch – AT	14	←		1
Relay module	4	⇋	Ignition OFF	11-14 V after 5 minutes
	4	⇋	Ignition ON	1 V
	6	⇋	Engine running – coolant blower motor OFF	11-14 V
	6	⇋	Engine running – coolant blower motor ON	0-1 V
	20	⇋	Ignition ON	0,7 V briefly then 11-14 V
	20	⇋	Engine running	0,7 V
	28	←	Ignition OFF	0 V after 5 minutes
	28	←	Ignition ON	11-14 V
Tachometer – some models	12	⇒	Engine idling	30 Hz
	12	⇒	3000 rpm	100 Hz

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Component/circuit description	ECM pin	Signal	Condition	Typical value
Throttle position (TP) sensor	8	←	Ignition ON – throttle closed	0,6 V
	8	←	Ignition ON – throttle fully open	4,3 V
	9	⇒	Ignition ON	5 V
	30	⌋	Ignition ON	0 V
1 Connected pin - no test data available				