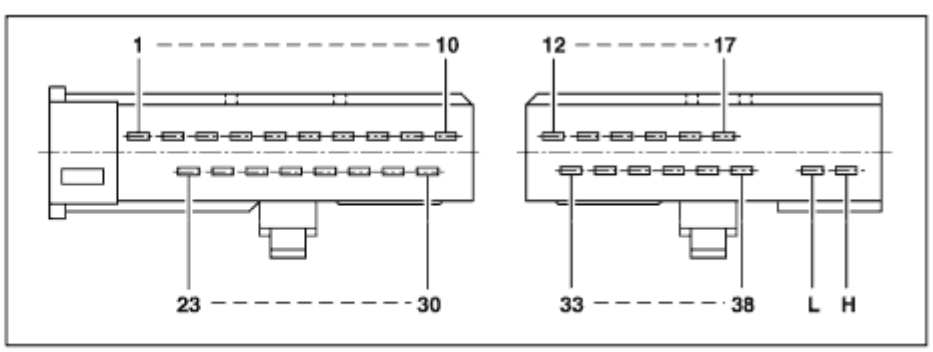
ETC Control - Test

⇒		Test scope	Test connection			Test condition	Nominal value	Possible cause/Remedy
1.0	021	**ETC Control Module (N15/3)** Voltage supply Circuit 87	30	N15/3 (V)	29	Ignition: **ON**	11 - 14 V	Wiring, Base module
2.0		**Diagnosis output**	30	N15/3 (V)	1	Ignition: **ON**	8 - 14 V	Wiring, N15/3
3.0	010	**Solenoid valves** Voltage supply	30	N15/3 (V)	38	Ignition: **ON**	11 - 14 V	☐ **23⇒ 1.0**, Electrical conductor plate, ETC control module (N15/3)
4.0	002	**1-2/4-5 shift solenoid valve (Y3/6y3)** Internal resistance	14	N15/3 (Ω)	38	Disconnect ETC control module (N15/3). Ignition: **OFF**	2.5 - 6.5 Ω	Wiring, Y3/6y3
5.0	003	**2-3 shift solenoid valve (Y3/6y5)** Internal resistance	16	N15/3 (Ω)	38	Disconnect N15/3 Ignition: **OFF**	2.5 - 6.5 Ω	Wiring, Y3/6y5
6.0	004	**3-4 shift solenoid valve (Y3/6y4)** Internal resistance	15	N15/3 (Ω)	38	Disconnect N15/3 Ignition: **OFF**	2.5 - 6.5 Ω	Wiring, Y3/6y4
7.0	005	**PWM solenoid valve (Y3/6y6)** Internal resistance	17	N15/3 (Ω)	38	Disconnect N15/3 Ignition: **OFF**	2 - 4 Ω	Wiring, Y3/6y6
8.0	006	**Modulator pressure regulating solenoid valve (Y3/6y1)** Internal resistance	36	N15/3 (Ω)	38	Disconnect N15/3 Ignition: **OFF**	4 - 8 Ω	Wiring, Y3/6y1
9.0	007	**Shift pressure regulating solenoid valve (Y3/6/2)** Internal resistance	37	N15/3 (Ω)	38	Disconnect N15/3 Ignition: **OFF**	4 - 8 Ω	Wiring, Y3/6y2
10.0	008	**R/P lock solenoid (Y66/1)** Internal resistance **Note:** Test step applies to: 722.6 in Model 163 without touch shift.	1	Y66/1 (Ω)	2	Test directly at Y66/1	20 - 35 Ω	Y66/1
11.0	009	**Starter lock-out relay module (K38/3)** Internal resistance	85	K38/3 (Ω)	86	Test directly at K38/3	≥ 50 Ω	K38/3
12.0	011	**RPM sensors** Voltage supply	33	N15/3 (V)	13	Ignition: **ON**	4 - 8 V	Wiring, Electrical conductor plate, N15/3
13.0	020	**Starter lock-out contact (Y3/6s1)** Function **Note:** Test step applies to: 722.6 in Model 163 without touch shift.	34	N15/3 (Ω)	33	Disconnect N15/3 R/D/4/3/2/1 selected P/N selected	0.5 - 2.5 kΩ >20 kΩ	Wiring, Adjustment of shift linkage, Starter lock-out contact (Y3/6s1), Electrical conductor plate, Transmission range recognition switch (S16/10).

14.0	020	**Starter lock-out contact (Y6/6s1)** Function **Note:** Test step applies to: 722.6 in Model 163 with touch shift.	34	N15/3	33	Disconnect N15/3 R/D/4/3/2/1 selected P/N selected	 0.5 - 2.5 kΩ >20 kΩ	Wiring, Adjustment of shift linkage, Starter lock-out contact (Y6/6s1), Electrical conductor plate.
15.0		**CAN element in RCL control module (N54)** Resistance	L	N54	H	Disconnect 2-pole connector at N54 and test directly at control module.	115 - 125 Ω	N54
16.0		**CAN element in ETC control module (N15/3)** Resistance	L	N15/3	H	Disconnect 14-pole connector at N15/3 and test directly at control module.	50 - 100 Ω	N15/3

Connector Layout - ETC control module (N15/3), applies to:
722.6 up to 6/30/99 in Models 202, 208, 210 without touch shift.
722.6 in Models 129, 140, 163 without touch shift.
722.602/605 in Model 170 without touch shift.



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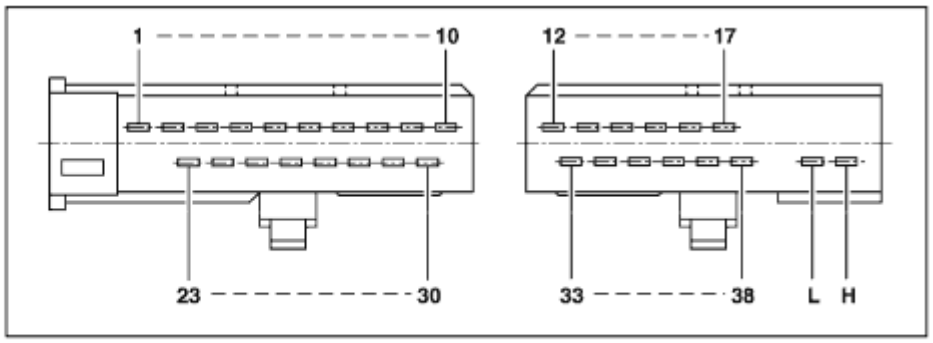
Connector Layout - ETC control module (N15/3), applies to:
722.6 as of 7/01/99 in Models 202, 208, 210 with touch shift.
722.6 in Model 163 with touch shift.
722.616/618 in Model 170 with touch shift.



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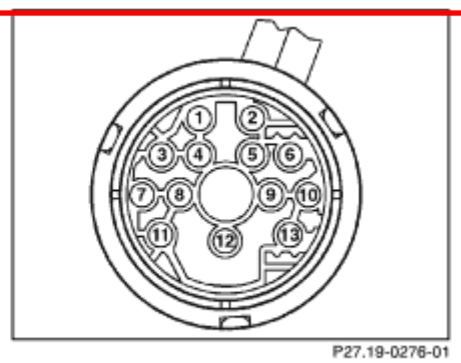
Connector Layout - 13 position round connector at transmission

1	RPM sensor 3 (Y3/6n3)
2	Modulating pressure regulating solenoid valve (Y3/6y1)
3	RPM sensor 2 (Y3/6n2)
4	Signal in: temperature sensor (Y3/6b1) and starter lock-out contact (Y3/6s1)
5	–
6	Solenoid valves voltage supply
7	Sensor voltage supply
8	2-3 shift solenoid valve (Y3/6y5)
9	3-4 shift solenoid valve (Y3/6y4)
10	Shift pressure regulating solenoid valve (Y3/6y2)
11	PWM solenoid valve (torque converter lock-up) (Y3/6y6)
12	Sensor ground
13	1-2/4-5 shift solenoid valve (Y3/6y3)



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