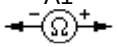
Instrument Cluster (IC) - Test

⇒	Test scope	Test connection			Test condition	Nominal value	Possible cause/Remedy
1.0	**Instrument cluster (A1)** Voltage supply Terminal 30	3 (A.3)	A1 V	11 (A.11)	Ignition: **OFF** Remove A1 Disconnect connector "A" (18-pin)	11 - 14 V	Fuse 13 in fuse and relay box (F1), Wiring, Values O.K.: ⇒ **1.1**
1.1	Voltage supply Terminal15, fused	3 (A.3)	A1 V	9 (A.9)	Ignition: **ON**	11 - 14 V	Fuse 22 in fuse and relay box (F1), Wiring, Values O.K.: ⇒ **1.2**
1.2	Voltage supply Terminal 15, fused	3 (A.3)	A1 V	7 (A.7)	Ignition: **ON**	11 - 14 V	Fuse 10 in fuse and relay box (F1), Wiring, Values O.K.: A1
2.0	**HHT interface** Connection between A1 and data link connector (X11/4)	X11/4 15	A1 Ω	11 (B.11)	Ignition: **OFF** Remove A1, Disconnect connector "B" (12-pin)	≤ 5 Ω	Wiring.
3.0	**CAN bus data lines** Resistance	1 (B.9)	A1 Ω	10 (B.10)	Ignition: **OFF** Disconnect connector "B" (12-pole) (N3/10 engine control modules is connected to CAN)	around 120 Ω	CAN: ⎓, ⎓ N3/10 Values O.K.: ⇒ **3.1**
3.1	CAN bus data lines Voltage Low-data line	Grd	A1 V	10 (B.10)	Ignition: **ON**	around 2.3 V	N3/10 Values O.K.: ⇒ **3.2**
3.2	CAN bus data lines Voltage High-data line	Grd	A1 V	9 (B.9)	Ignition: **ON**	around 2.6 V	N3/10
4.0	**Instrument cluster (A1)**	9	A1	10	Ignition: **OFF** Disconnect	around 120 Ω	A1

	CAN bus data input resistance	(B.9)		(B.10)	connector "B" (12-pole)		
5.0	**Steering lock switch (S97/1)**	⊥ **Grd**	A1 	▬ 14 (A.14)	Ignition: **OFF** Disconnect connector "A" (18-pole) steering locked steering unlocked	< 1 Ω > 20 k Ω	Wiring (S97/1)
6.0	**Engine coolant level (ECL) switch (S41)** **As of 3.98**	1	S41 	2	Ignition: **OFF** Disconnect connector on S41 and connect resistance substitution unit. Set resistance to 70k Ω, Start engine, wait up to 1 minute. Set resistance to 30k Ω, wait up to 1 minute.	ECL warning lamp (A1e11) comes on. ECL warning lamp (A1e11) goes off	Values O.K.: ECL switch (S41) Values not O.K.: Wiring to A1, A1