1.4 Headlamp Range Adjustment (HRA)

⇒	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0	Headlamp range adjustment control module (N71) Voltage supply	N71 3 (() → 14	Disconnect connector from N71. Ignition: ON	11 – 14 V	Model 208: Fuse 13 in fuse and relay box (F1). Model 210: Fuse 13 in fuse and relay box (F1).
2.0	Activation voltage from illumination control module (N7-1)	N71 3 (()) +→ → 7	Disconnect connector from N71. Parking lamps: ON	5.6 – 9.8 V	Wiring, Illumination control module (N7-1),
3.0	Rear axle headlamp range adjustment sensor (A51) voltage supply	$\begin{array}{c} A51 \\ 1 - \checkmark \stackrel{\frown \textcircled{0}^{+}}{\xrightarrow{\frown} \textcircled{0}^{+}} \qquad \longrightarrow 5 \\ \stackrel{\frown \textcircled{0}^{+}}{\xrightarrow{\frown} \textcircled{0}^{+}} \end{array}$	Disconnect connector from rear axle headlamp range adjustment sensor.(A51). Ignition: ON	4.9 - 5.1 V < 5 Ω	Wiring. Illumination control module (N7-1), \Rightarrow 3.1

⇒	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
4.0	Front axle headlamp range adjustment sensor (A52) voltage supply	A52 1 - (→ ① →) → 5	Disconnect connector from rear axle headlamp range adjustment sensor.(A52). Ignition: ON	4.9 - 5.1 V	Wiring. Illumination control module (N7-1), \Rightarrow 4.1
4.1	Signal voltage	A52 1 (()) ⁺ → → → 4	Front axle headlamp range adjustment sensor.(A52) connected . Ignition: ON	0.2 - 4.9 V	Front axle headlamp range adjustment sensor.(A52)

\Rightarrow	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
5.0	Headlamp range adjustment motor (E1m1). Voltage supply	E1m1 1 — ∢ — — 3	Disconnect connector from.headlamp range adjustment motor (E1m1). Ignition: ON	4.9 – 5.1 V	Wiring, Illumination control module (N7-1), \Rightarrow 5.1
5.1	Signal voltage sensor	E1m1 1 — (← ()+)— 2 ← ()+	Headlamp range adjustment.motor (E1m1) connected . Ignition: ON	0.2 - 4.9 V < 5 Ω	.Headlamp range adjustment.motor (E1m1) ⇒ 5.2
5.2	Voltage supply motor.	E1m1 4 (-() ⁺ -) 5	Disconnect connector from.headlamp range adjustment motor (E1m1). Activate headlamp range adjustment motor (E1m1). Ignition: ON	6 - 14 V	Wiring, Illumination control module (N7-1),

\Rightarrow	Test scope	Test connection		Test condition	Nominal value	Possible cause/Remedy
6.0	Headlamp range adjustment motor (E2m1). Voltage supply	E2m1 1 — ∢ → – ① + →) —3	Disconnect connector from.headlamp range adjustment motor (E2m1). Ignition: ON	4.9 – 5.1 V	Wiring, Illumination control module (N7-1), \Rightarrow 6.1
6.1	Signal voltage sensor	E2m1 1 (() ⁺ - (<u>Ω</u>) ⁺ -	> −2	Headlamp range adjustment.motor (E2m1) connected . Ignition: ON	0.2 - 4.9 V < 5 Ω	.Headlamp range adjustment.motor (E1m1) ⇒ 6.2
6.2	Voltage supply motor.	E2m1 4 ∢`() ⁺ →) — 5	Disconnect connector from.headlamp range adjustment motor (E2m1). Activate headlamp range adjustment motor (E2m1). Ignition: ON	6 - 14 V	Wiring, Illumination control module (N7-1),