

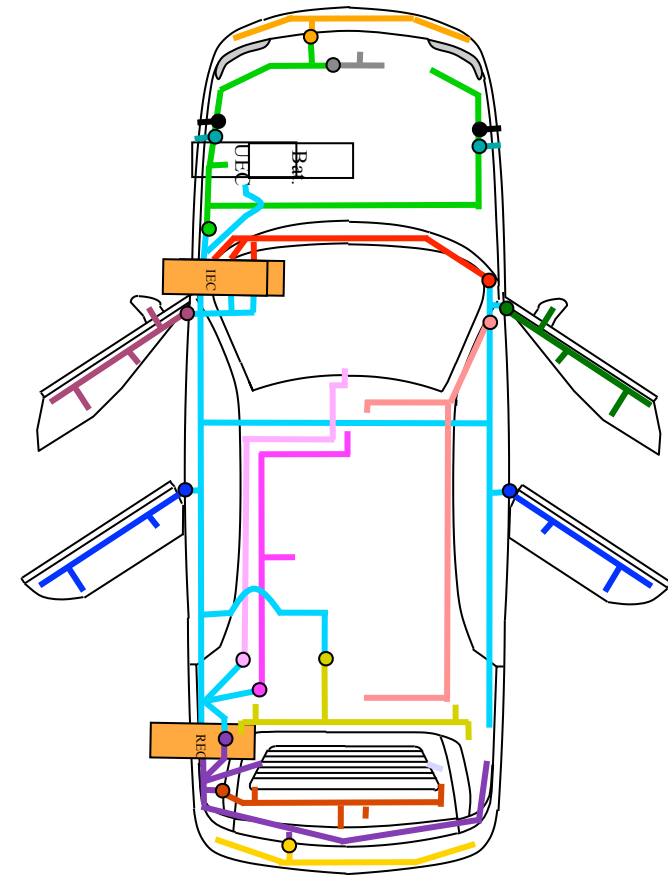
Wiring harness analysis all tracking vehicles

Epsilon II

Technical review May, 23rd 2005

Body - Harnesses partitioning GME TRACKING MODEL

	Description	Copper [kg]	Estimated Weight [kg]	Cut Leads	Wires Length [MT]
■	W.H. - FRT FOG LP WRG	0,0067	0,0127	2	1,40
■	W.H. - ENG COOL WRG	0,1761	0,3330	9	11,37
■	W.H. - HDLP WRG	1,0550	1,9946	56	83,79
■	W.H. - FRT WHL SPD SEN ABS	0,0042	0,0079	2	0,29
■	W.H. - AC GROUND BATTERY	0,0960	0,1815	1	0,40
■	W.H. - BODY WRG	2,7472	5,2893	218	339,57
■	W.H. - I/P WRG	1,2888	2,4367	185	150,42
■	W.H. - FRT S/D DR WRG	0,2540	0,4802	36	34,46
■	W.H. - FRT S/D CODR WRG	0,2458	0,4647	32	32,39
■	W.H. - RR S/D WRG	0,0374	0,0708	7	5,08
■	W.H. - RDO ANT WRG	0,0000	0,0000	0	0,00
■	W.H. - RF ACSRY WRG	NA	0,0900	NA	NA
■	W.H. - RR WHL SPD SEN WRG	0,1015	0,1919	8	7,05
■	W.H. - R/CMP T LID LAT REL WRG	0,1624	0,3070	16	25,92
■	W.H. - T/LP WRG	0,2456	0,4644	38	36,02
■	W.H. - RAWDO DEFR RR	0,0062	0,0118	1	0,26
	Total Epsilon II	6,4269	12,3365	611	728,41



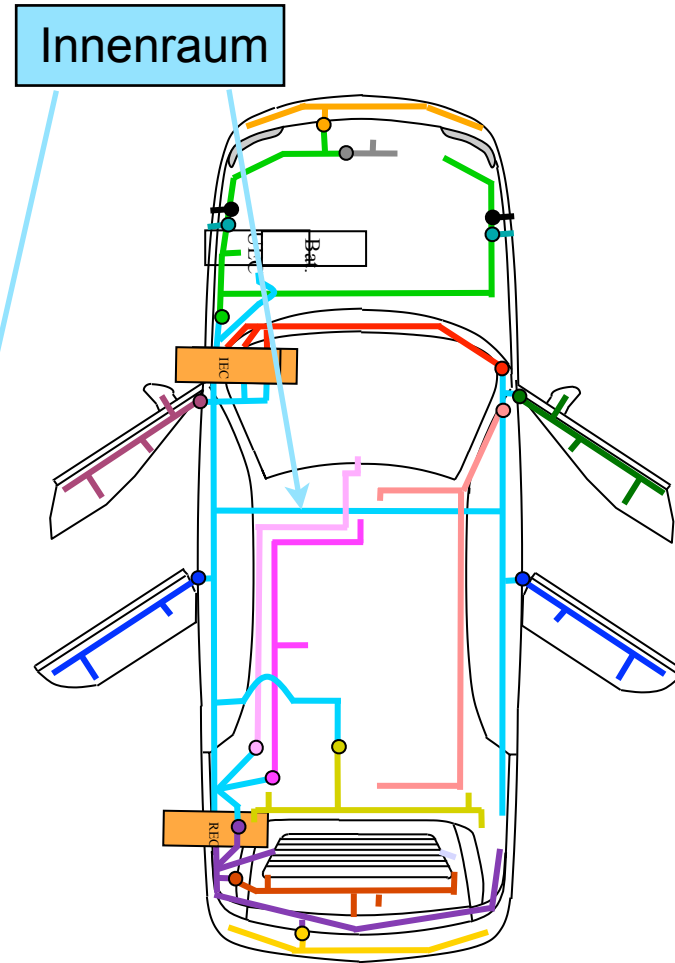
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■	W.H. - HDLP WRG	1,0550	1,9946	56	83,79
■	W.H. - FRT WHL SPD SEN ABS	0,0042	0,0079	2	0,29
■	W.H. - AC GROUND BATTERY	0,0960	0,1815	1	0,40
■	W.H. - BODY WRG	2,7472	5,2893	218	339,57
■	W.H. - I/P WRG	1,2888	2,4367	185	150,42
■	W.H. - FRT S/D DR WRG	0,2540	0,4802	36	34,46
■	W.H. - FRT S/D CODR WRG	0,2458	0,4647	32	32,39
■	W.H. - RR S/D WRG	0,0374	0,0708	7	5,08
■	W.H. - RDO ANT WRG	0,0000	0,0000	0	0,00
■	W.H. - RF ACSRY WRG	NA	0,0900	NA	NA
■	W.H. - RR WHL SPD SEN WRG	0,1015	0,1919	8	7,05
■	W.H. - R/CMP T LID LAT REL WRG	0,1624	0,3070	16	25,92
■	W.H. - T/LP WRG	0,2456	0,4644	38	36,02
■	W.H. - RAWDO DEFR RR	0,0062	0,0118	1	0,26
	Total Epsilon II	6,4269	12,3365	611	728,41



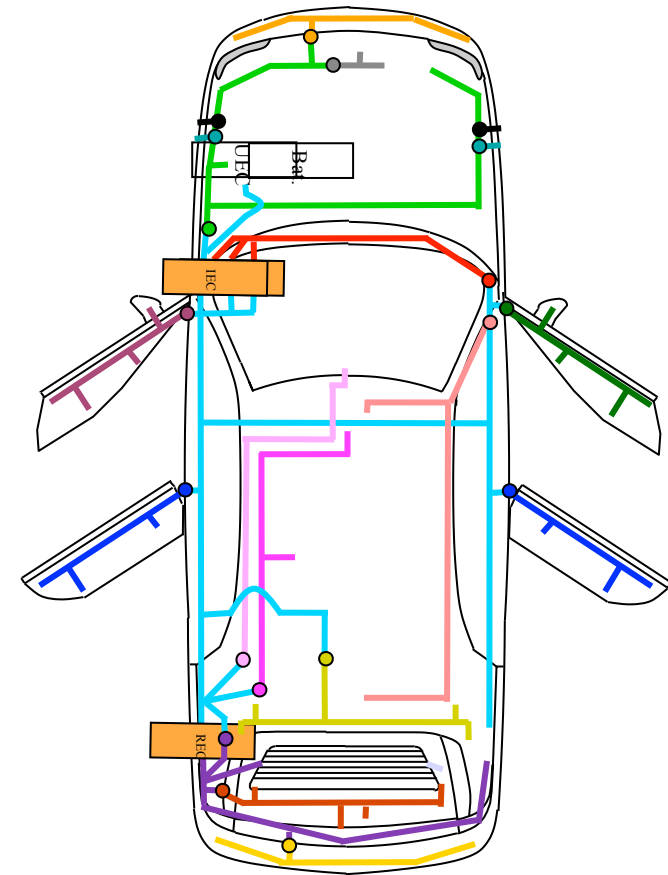
Wiring harness analysis all tracking vehicles

Epsilon II

Technical review May, 23rd 2005

Body - Harnesses partitioning GME TRACKING MODEL

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■	W.H. - FRT FOG LP WRG	0,0067	0,0127	2	1,40
■	W.H. - ENG COOL WRG	0,1761	0,3330	9	11,37
■	W.H. - HDLP WRG	1,0550	1,9946	56	83,79
■	W.H. - FRT WHL SPD SEN ABS	0,0042	0,0079	2	0,29
■	W.H. - AC GROUND BATTERY	0,0960	0,1815	1	0,40
■	W.H. - BODY WRG	2,7472	5,2893	218	339,57
■	W.H. - I/P WRG	1,2888	2,4367	185	150,42
■	W.H. - FRT S/D DR WRG	0,2540	0,4802	36	34,46
■	W.H. - FRT S/D CODR WRG	0,2458	0,4647	32	32,39
■	W.H. - RR S/D WRG	0,0374	0,0708	7	5,08
■	W.H. - RDO ANT WRG	0,0000	0,0000	0	0,00
■	W.H. - RF ACSRY WRG	NA	0,0900	NA	NA
■	W.H. - RR WHL SPD SEN WRG	0,1015	0,1919	8	7,05
■	W.H. - R/CMP T LID LAT REL WRG	0,1624	0,3070	16	25,92
■	W.H. - T/LP WRG	0,2456	0,4644	38	36,02
■	W.H. - RAWDO DEFR RR	0,0062	0,0118	1	0,26
	Total Epsilon II	6,4269	12,3365	611	728,41



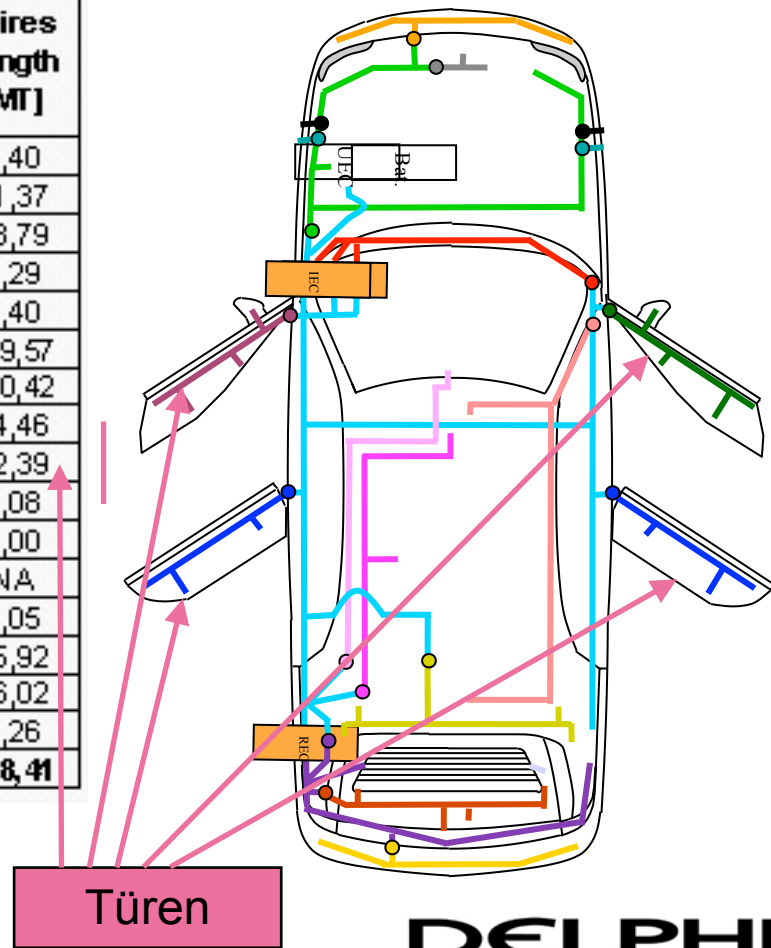
Wiring harness analysis all tracking vehicles

Epsilon II

Technical review May, 23rd 2005

Body - Harnesses partitioning GME TRACKING MODEL

	Description	Copper [kg]	Estimated Weight [kg]	Cut Leads	Wires Length [MT]
■	W.H. - FRT FOG LP WRG	0,0067	0,0127	2	1,40
■	W.H. - ENG COOL WRG	0,1761	0,3330	9	11,37
■	W.H. - HDLP WRG	1,0550	1,9946	56	83,79
■	W.H. - FRT WHL SPD SEN ABS	0,0042	0,0079	2	0,29
■	W.H. - AC GROUND BATTERY	0,0960	0,1815	1	0,40
■	W.H. - BODY WRG	2,7472	5,2893	218	339,57
■	W.H. - IP WRG	1,2888	2,4367	185	150,42
■	W.H. - FRT S/D DR WRG	0,2540	0,4802	36	34,46
■	W.H. - FRT S/D CODR WRG	0,2458	0,4647	32	32,39
■	W.H. - RR S/D WRG	0,0374	0,0708	7	5,08
■	W.H. - RDO ANT WRG	0,0000	0,0000	0	0,00
■	W.H. - RF ACSRY WRG	NA	0,0900	NA	NA
■	W.H. - RR WHL SPD SEN WRG	0,1015	0,1919	8	7,05
■	W.H. - R/CMP T LID LAT REL WRG	0,1624	0,3070	16	25,92
■	W.H. - T/LP WRG	0,2456	0,4644	38	36,02
■	W.H. - RAWDO DEFR RR	0,0062	0,0118	1	0,26
	Total Epsilon II	6,4269	12,3365	611	728,41



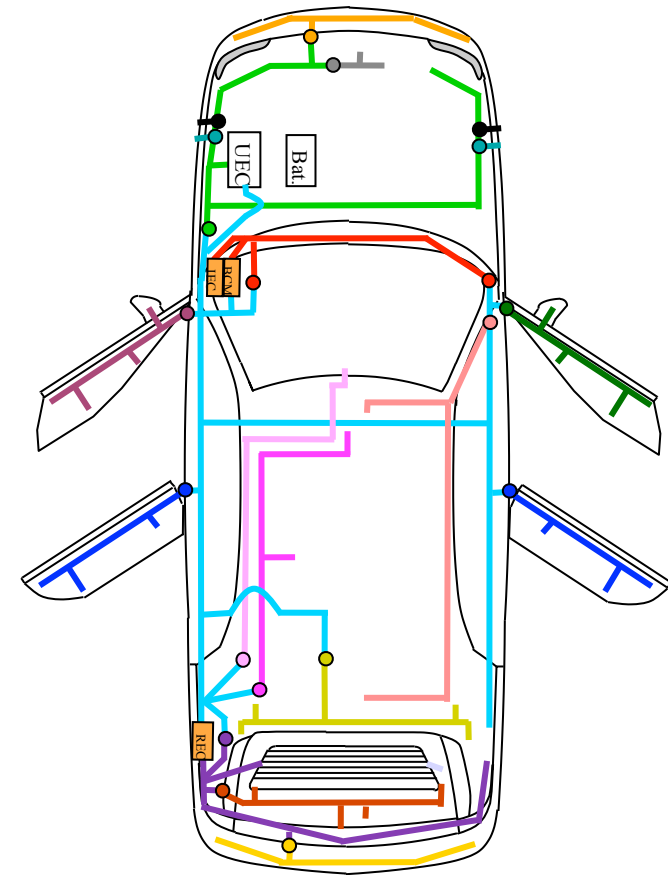
Wiring harness analysis all tracking vehicles

Epsilon II

Technical review May, 23rd 2005

Body - Harnesses partitioning GMNA BASE TRACKING MODEL

	Description	Copper [kg]	Estimated Weight [kg]	Cut Leads	Wires Length [MT]
■	W.H. - FRT FOG LP WRG	0,0067	0,0127	2	1,40
■	W.H. - ENG COOL WRG	0,1826	0,3453	9	12,05
■	W.H. - HDLP WRG	1,1849	2,2403	64	89,86
■	W.H. - FRT WHL SPD SEN ABS	0,0042	0,0079	2	0,29
■	W.H. - AC GROUND BATTERY	0,0960	0,1815	1	0,40
■	W.H. - BODY WRG	3,3284	6,3881	256	420,32
■	W.H. - I/P WRG	1,4051	2,6566	205	162,80
■	W.H. - FRT S/D DR WRG	0,1822	0,3444	23	24,30
■	W.H. - FRT S/D CODR WRG	0,1764	0,3335	23	23,16
■	W.H. - RR S/D WRG	0,0374	0,0708	7	5,08
■	W.H. - RDO ANT WRG	0,0000	0,0000	0	0,00
■	W.H. - RF ACSRY WRG	NA	0,0700	NA	NA
■	W.H. - RR WHL SPD SEN WRG	0,0480	0,0907	4	3,33
■	W.H. - R/CMP T LID LAT REL WRG	0,0911	0,1723	9	13,00
■	W.H. - TLP WRG	0,2767	0,5232	37	37,98
■	W.H. - RAWDO DEFR RR	0,0062	0,0118	1	0,26
	Total Epsilon II	7,0260	13,4491	643	794,22



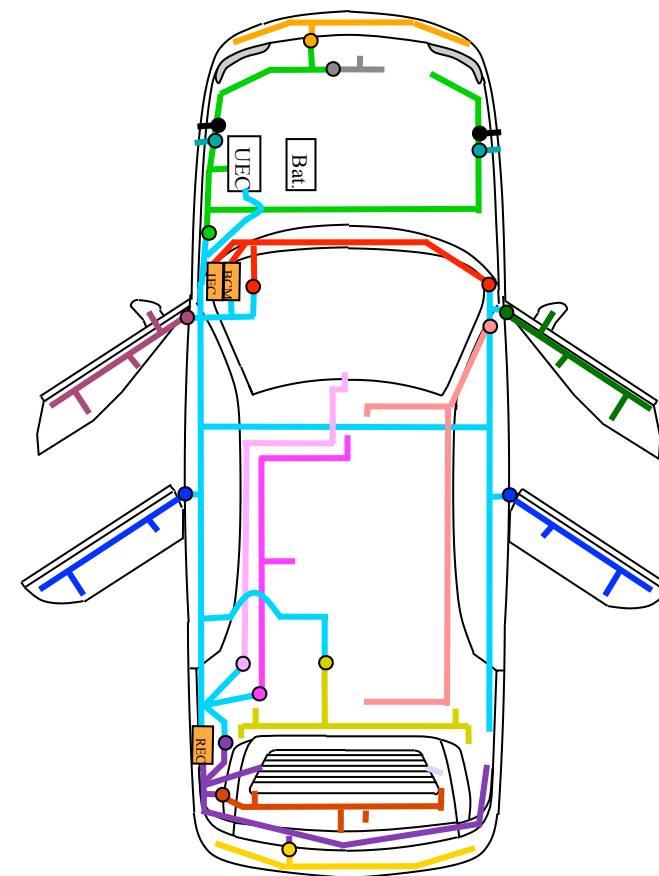
Wiring harness analysis all tracking vehicles

Epsilon II

Technical review May, 23rd 2005

Body - Harnesses partitioning GMNA MID TRACKING MODEL

	Description	Copper [kg]	Estimated Weight [kg]	Cut Leads	Wires Length [MT]
■	W.H. - FRT FOG LP WRG	0,0067	0,0127	2	1,40
■	W.H. - ENG COOL WRG	0,1826	0,3453	9	12,05
■	W.H. - HDLP WRG	1,2175	2,3018	69	95,66
■	W.H. - FRT WHL SPD SEN ABS	0,0042	0,0079	2	0,29
■	W.H. - AC GROUND BATTERY	0,0960	0,1815	1	0,40
■	W.H. - BODY WRG	5,3882	10,2826	307	548,98
■	W.H. - IP WRG	1,5492	2,9290	225	183,32
■	W.H. - FRT S/D DR WRG	0,1857	0,3511	26	21,06
■	W.H. - FRT S/D CODR WRG	0,2158	0,4080	30	26,26
■	W.H. - RR S/D WRG	0,1019	0,1927	17	12,59
■	W.H. - RDO ANT WRG	0,0000	0,0000	0	0,00
■	W.H. - RF ACSRY WRG	NA	0,1150	NA	NA
■	W.H. - RR WHL SPD SEN WRG	0,0480	0,0907	4	3,33
■	W.H. - R/CMP TLID LAT REL WRG	0,0911	0,1723	9	13,00
■	W.H. - TLP WRG	0,3017	0,5705	43	42,94
■	W.H. - RR OBJECT SEN WRG	0,0765	0,1446	19	15,94
■	W.H. - RAWDO DEFR RR	0,0062	0,0118	1	0,26
	Total Epsilon II	9,4713	18,1175	764	977,46



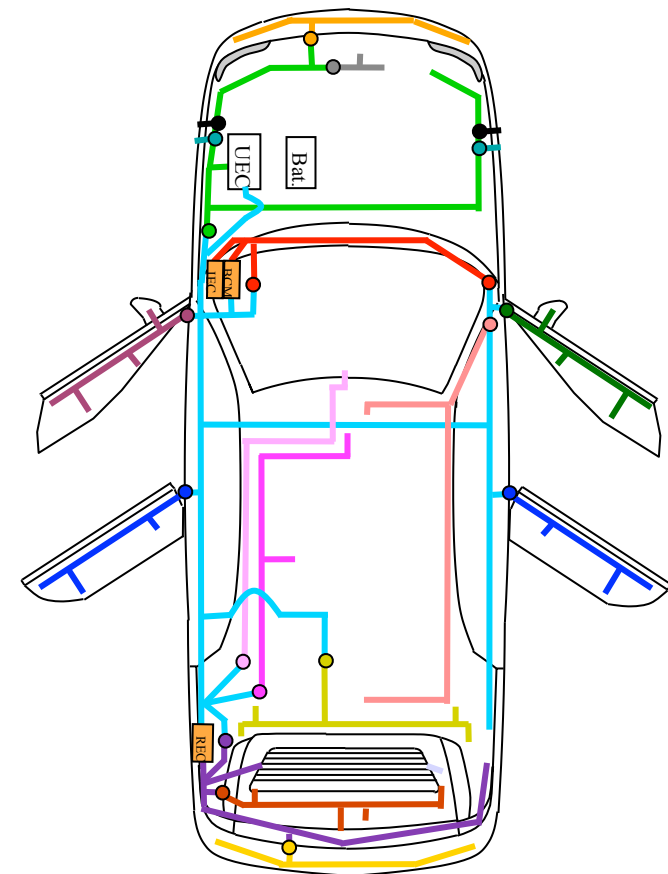
Wiring harness analysis all tracking vehicles

Epsilon II

Technical review May, 23rd 2005

Body - Harnesses partitioning GMNA UP LVL TRACKING MODEL

	Description	Copper [kg]	Estimated Weight [kg]	Cut Leads	Wires Length [MT]
■	W.H. - FRT FOG LP WRG	0,1319	0,2493	20	16,11
■	W.H. - ENG COOL WRG	0,1826	0,3453	9	12,05
■	W.H. - HDLP WRG	1,6601	3,1388	105	165,24
■	W.H. - FRT WHL SPD SEN ABS	0,0042	0,0079	2	0,29
■	W.H. - AC GROUND BATTERY	0,0960	0,1815	1	0,40
■	W.H. - BODY WRG	7,6055	14,4748	435	843,43
■	W.H. - I/P WRG	1,9030	3,5979	278	249,08
■	W.H. - FRT S/D DR WRG	0,2511	0,4747	40	34,00
■	W.H. - FRT S/D CODR WRG	0,2371	0,4482	36	30,69
■	W.H. - RR S/D WRG	0,1636	0,3093	29	21,96
■	W.H. - RDO ANT WRG	0,1201	0,2271	8	15,52
■	W.H. - RF ACSRY WRG	NA	0,1170	NA	NA
■	W.H. - I/S RR VIEW MIRR WRG	NA	0,1500	NA	NA
■	W.H. - RR WHL SPD SEN WRG	0,2567	0,4853	19	15,34
■	W.H. - R/CMP T LID LAT REL WRG	0,0911	0,1723	9	13,00
■	W.H. - T/LP WRG	0,2880	0,5445	41	40,07
■	W.H. - RAWDO DEFR RR	0,0062	0,0118	1	0,26
■	W.H. - SUSP ACTR WRG	0,0059	0,0112	2	0,41
	Total Epsilon II	13,0031	24,9469	1035	1457,85



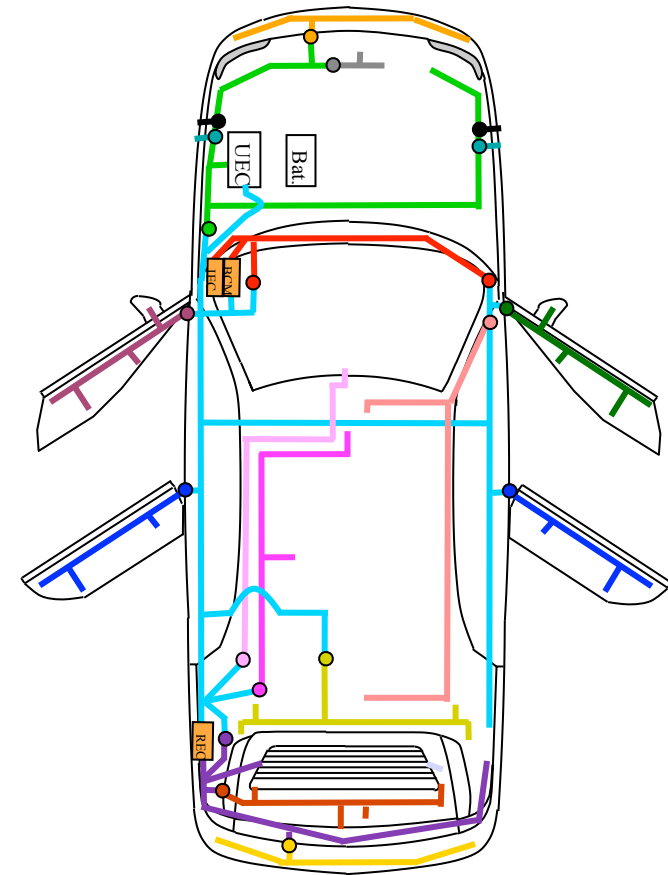
Wiring harness analysis all tracking vehicles

Epsilon II

Technical review May, 23rd 2005

Body - Harnesses partitioning BUICK POPULAR EQUIPPED TRACKING

	Description	Copper [kg]	Estimated Weight [kg]	Cut Leads	Wires Length [MT]
■	WV.H. - FRT FOG LP WRG	0,0885	0,1673	6	7,08
■	WV.H. - ENG COOL WRG	0,1826	0,3453	9	12,05
■	WV.H. - HDLP WRG	1,6897	3,1947	101	161,61
■	WV.H. - FRT WHL SPD SEN ABS	0,0042	0,0079	2	0,29
■	WV.H. - AC GROUND BATTERY	0,0960	0,1815	1	0,40
■	WV.H. - BODY WRG	5,7411	10,9499	334	591,99
■	WV.H. - IP WRG	1,8832	3,5605	264	219,94
■	WV.H. - FRT S/D DR WRG	0,1924	0,3638	28	22,81
■	WV.H. - FRT S/D CODR WRG	0,2180	0,4121	32	27,04
■	WV.H. - RR S/D WRG	0,1095	0,2070	19	14,16
■	WV.H. - RDO ANT WRG	0,1201	0,2271	8	15,52
■	WV.H. - RF ACSRY WRG	NA	0,0900	NA	NA
■	WV.H. - RR WHL SPD SEN WRG	0,1666	0,3150	15	14,05
■	WV.H. - R/CMP T LID LAT REL WRG	0,0911	0,1723	9	13,00
■	WV.H. - TLP WRG	0,3017	0,5705	43	42,94
■	WV.H. - R/WDO DEFR RR	0,0062	0,0118	1	0,26
■	WV.H. - RR OBJECT SEN WRG	0,0765	0,1446	19	15,94
■	WV.H. - SUSP ACTR WRG	0,0059	0,0112	2	0,41
	Total Epsilon II	10,9734	20,9325	893	1159,47



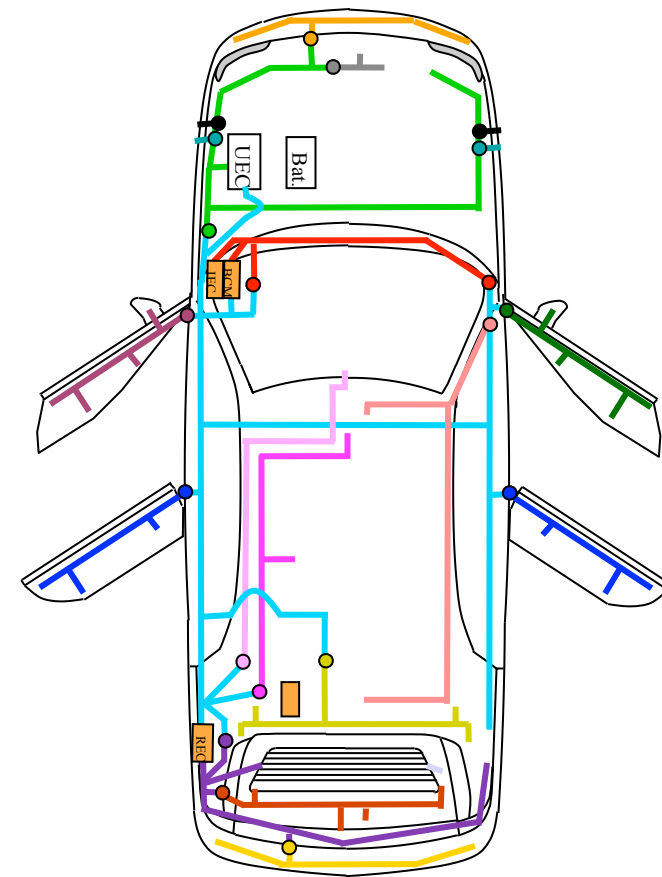
Wiring harness analysis all tracking vehicles

Epsilon II

Technical review May, 23rd 2005

Body - Harnesses partitioning Buick High End Vehicle

	Description	Copper [kg]	Estimated Weight [kg]	Cut Leads	Wires Length [MT]
■	W.H. - FRT FOG LP WRG	0,1496	0,2829	23	19,81
■	W.H. - ENG COOL WRG	0,1826	0,3453	9	12,05
■	W.H. - HDLP WRG	2,3924	4,5232	145	239,07
■	W.H. - FRT WHL SPD SEN ABS	0,0042	0,0079	2	0,29
■	W.H. - AC GROUND BATTERY	0,0960	0,1815	1	0,40
■	W.H. - BODY WRG	11,1603	21,1957	584	1.178,08
■	W.H. - I/P WRG	2,3776	4,4952	351	331,47
■	W.H. - FRT S/D DR WRG	0,3913	0,7399	61	58,56
■	W.H. - FRT S/D CODR WRG	0,3789	0,7163	56	55,31
■	W.H. - RR S/D WRG	0,1636	0,3093	29	21,96
■	W.H. - RDO ANT WRG	0,3444	0,6511	14	32,77
■	W.H. - RF ACSRY WRG	NA	0,1250	NA	NA
■	W.H. - I/S RR VIEW MIRR WRG	NA	0,1480	NA	NA
■	W.H. - RR WHL SPD SEN WRG	0,4254	0,8044	34	29,54
■	W.H. - R/CMP T LID LAT REL WRG	0,1112	0,2103	11	17,19
■	W.H. - T/LP WRG	0,4446	0,8406	65	63,23
■	W.H. - R/WDO DEFR RR	0,0062	0,0118	1	0,26
■	W.H. - RR OBJECT SEN WRG	0,0986	0,1864	22	20,54
■	W.H. - SUSP ACTR WRG	0,0059	0,0112	2	0,41
	Total Epsilon II	18,7329	35,7860	1410	2080,91

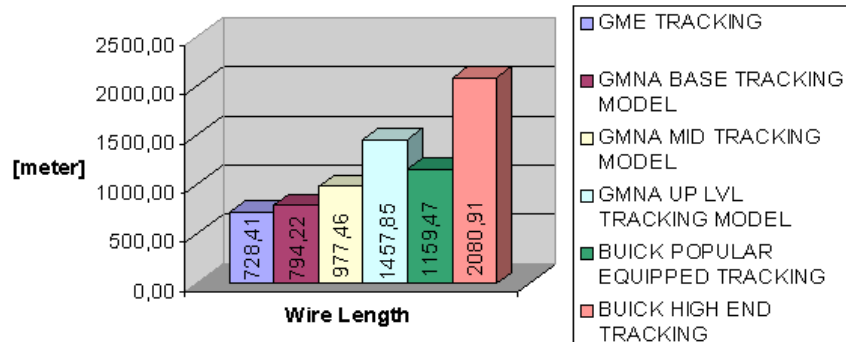


Wiring harness analysis all tracking vehicles

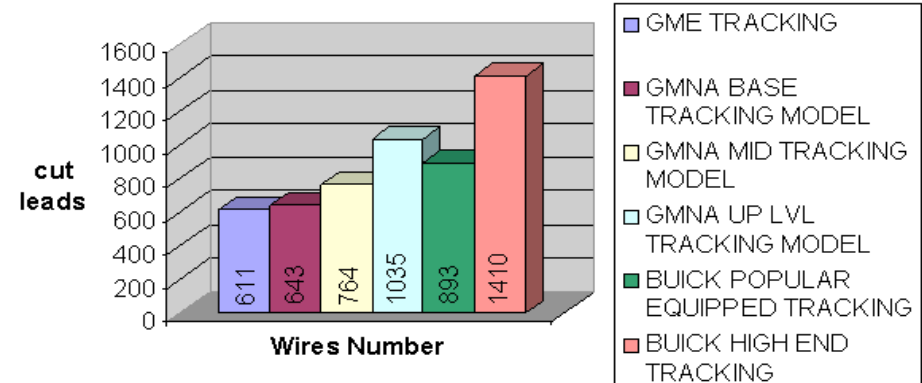
Epsilon II

Technical review May, 23rd 2005

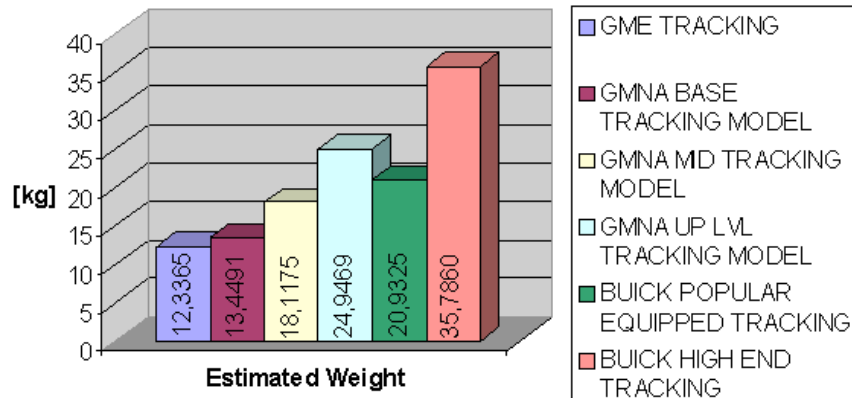
Comparison of Total wire length for Epsilon II Tracking Vehicles



Comparison of Cut Leads for Epsilon II Tracking Vehicles



Comparison of Estimated weight for Epsilon II Tracking Vehicles



Comparison of Copper weight for Epsilon II Tracking Vehicles

