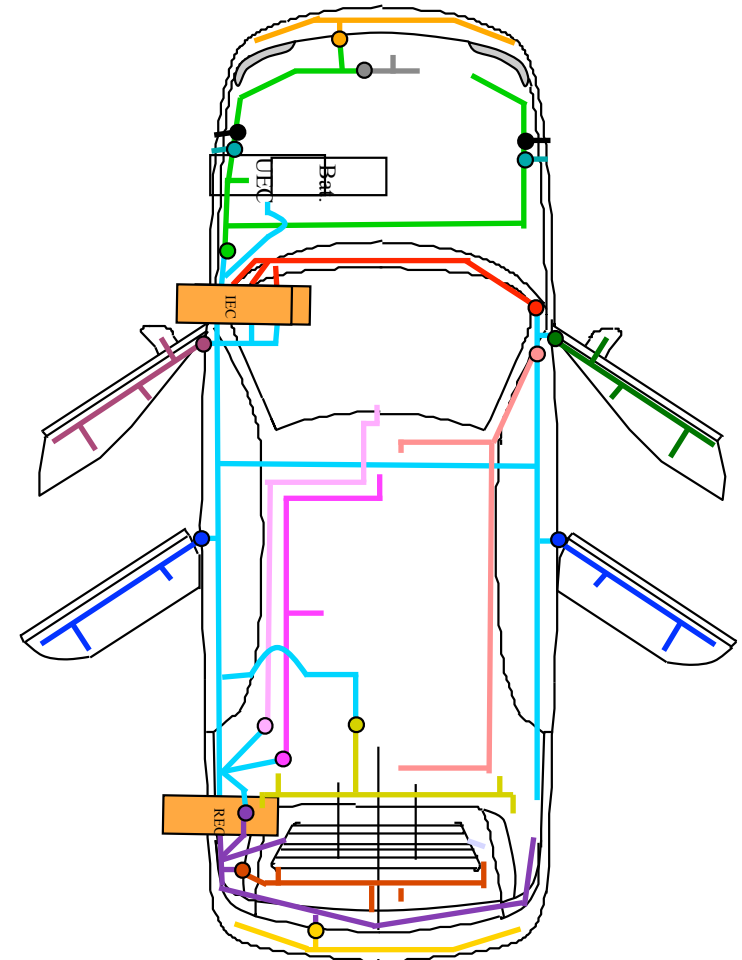


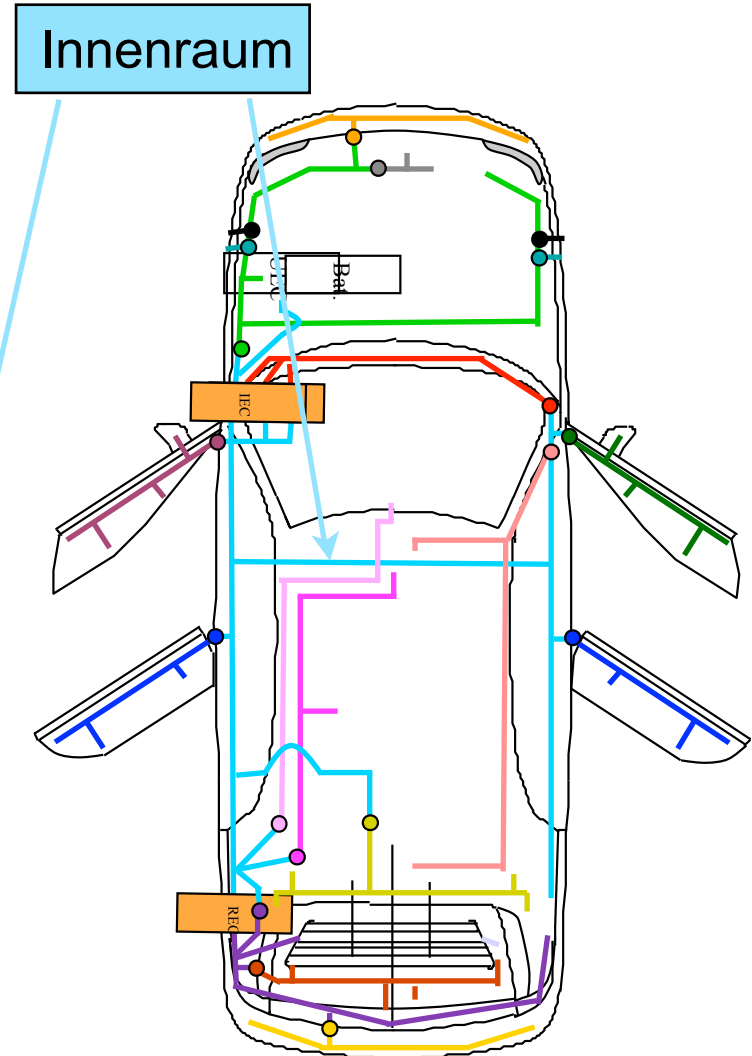
### Body - Harnesses partitioning GME TRACKING MODEL

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. - R/WDO DEFR RR	0,0062	0,0118	1	0,26
<b>Total Epsilon II</b>	<b>6,4269</b>	<b>12,3365</b>	<b>611</b>	<b>728,41</b>



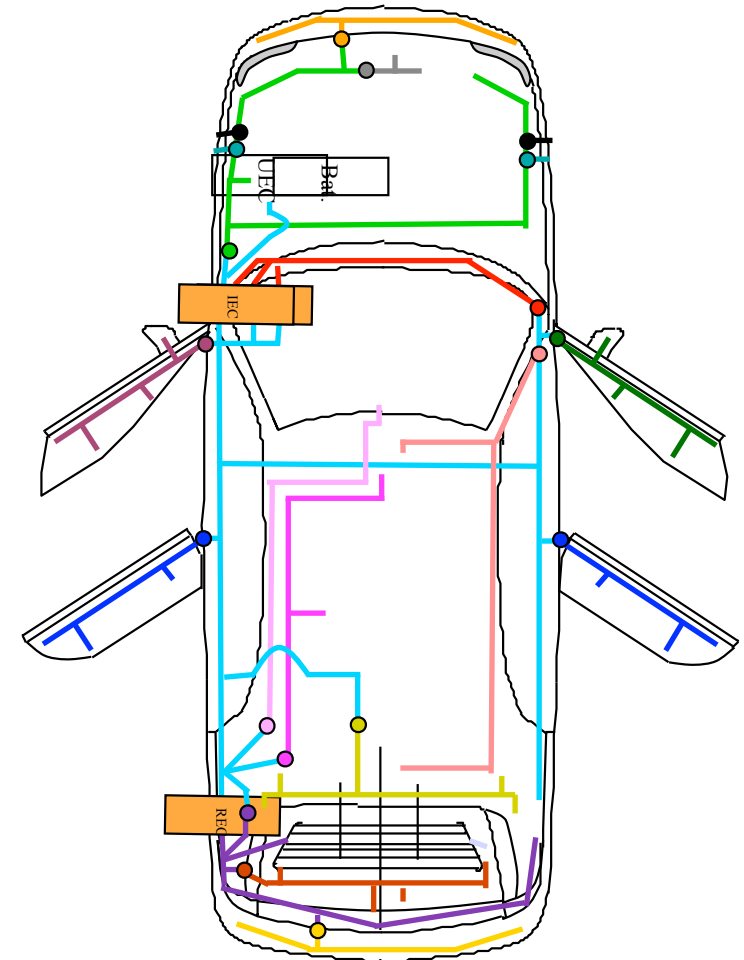
### Body - Harnesses partitioning GME TRACKING MODEL

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. - R/WDO DEFR RR	0,0062	0,0118	1	0,26
<b>Total Epsilon II</b>	<b>6,4269</b>	<b>12,3365</b>	<b>611</b>	<b>728,41</b>



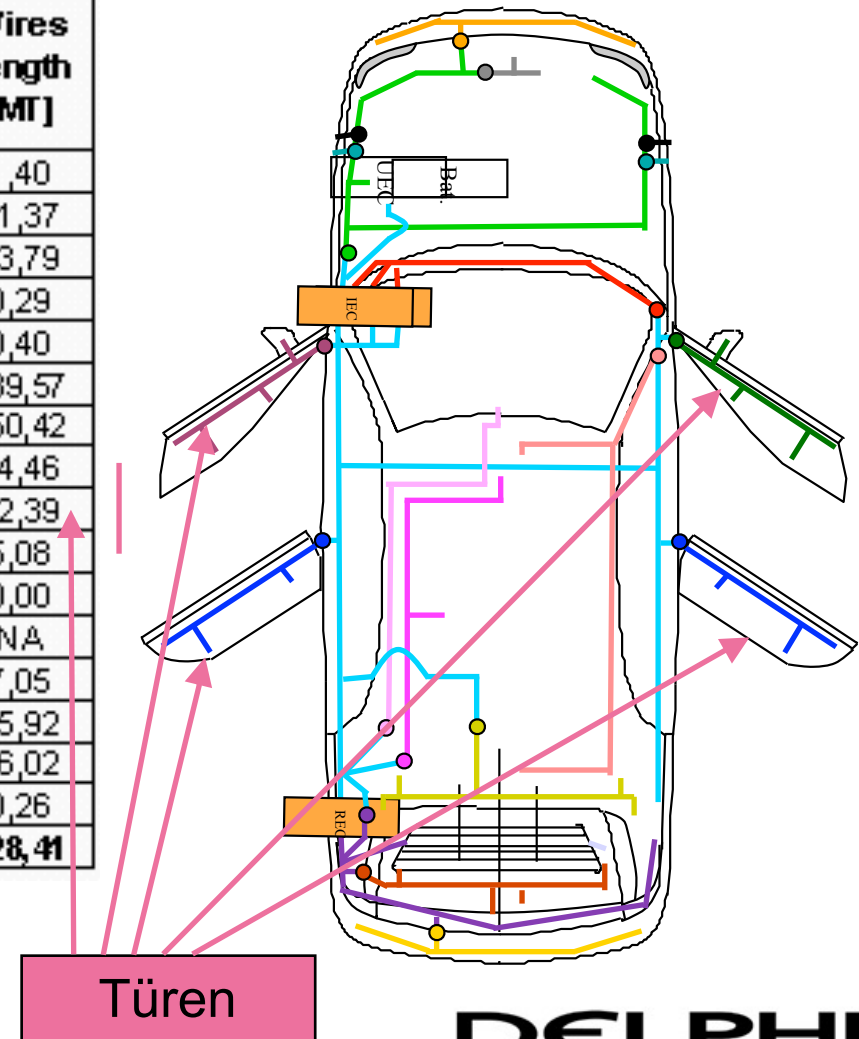
### Body - Harnesses partitioning GME TRACKING MODEL

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. - R/WDO DEFR RR	0,0062	0,0118	1	0,26
<b>Total Epsilon II</b>	<b>6,4269</b>	<b>12,3365</b>	<b>611</b>	<b>728,41</b>



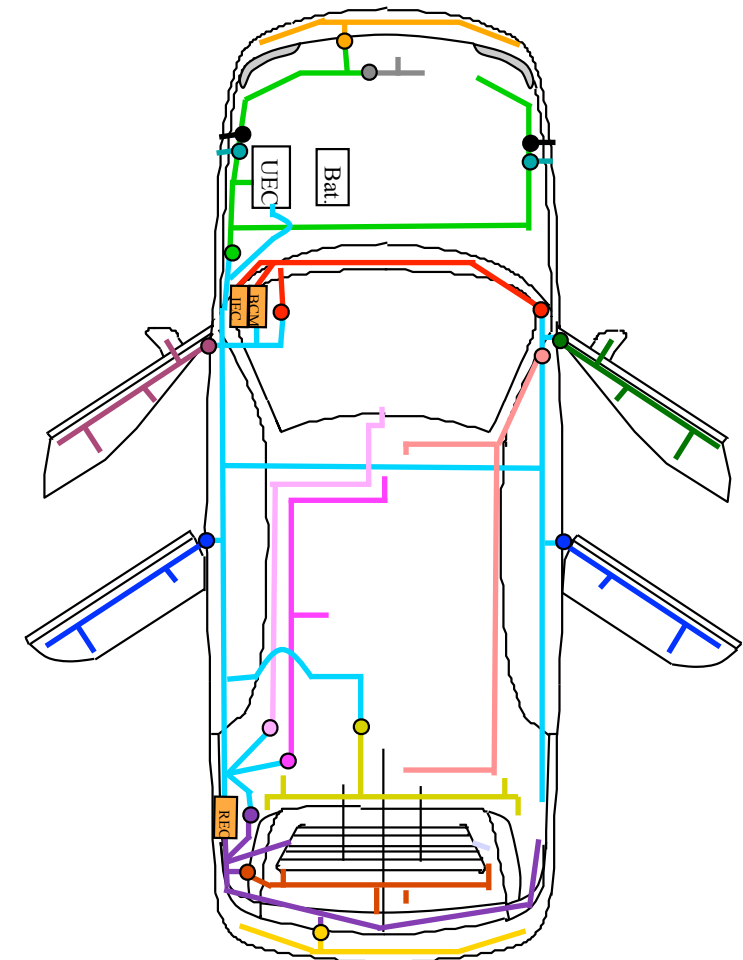
### Body - Harnesses partitioning GME TRACKING MODEL

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. - R/WDO DEFR RR	0,0062	0,0118	1	0,26
<b>Total Epsilon II</b>	<b>6,4269</b>	<b>12,3365</b>	<b>611</b>	<b>728,41</b>



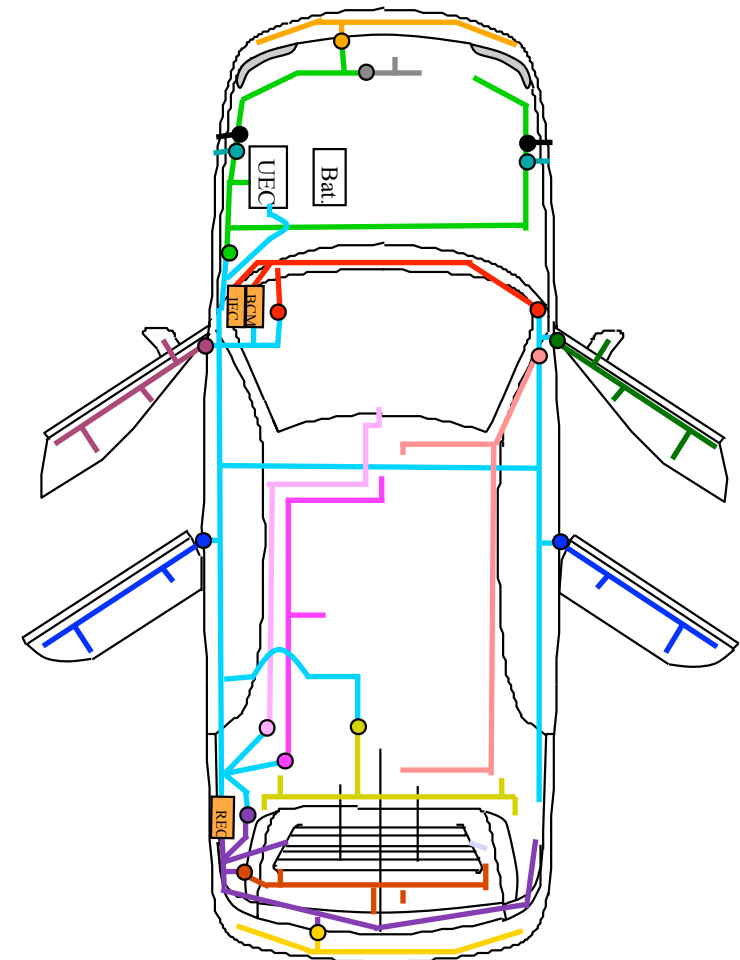
### Body - Harnesses partitioning GMNA BASE TRACKING MODEL

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. - IP 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. - R/WDO DEFR RR	0,0062	0,0118	1	0,26
<b>Total Epsilon II</b>	<b>7,0260</b>	<b>13,4491</b>	<b>643</b>	<b>794,22</b>



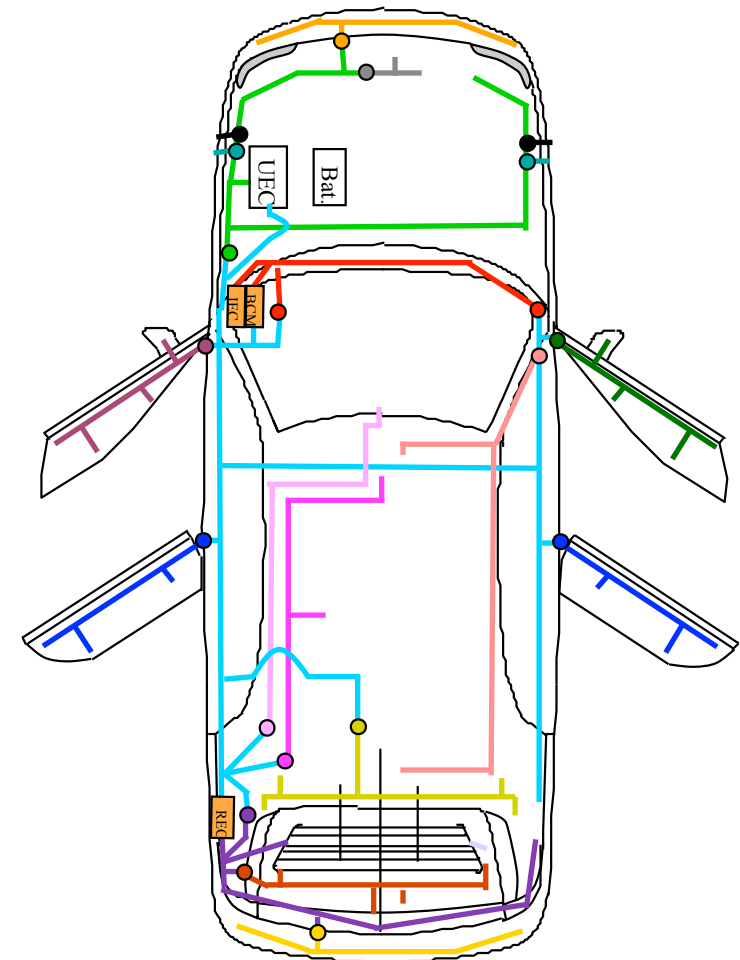
### Body - Harnesses partitioning GMNA MID TRACKING MODEL

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. - I/P 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 T LID 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. - R/WDO DEFR RR	0,0062	0,0118	1	0,26
<b>Total Epsilon II</b>	<b>9,4713</b>	<b>18,1175</b>	<b>764</b>	<b>977,46</b>



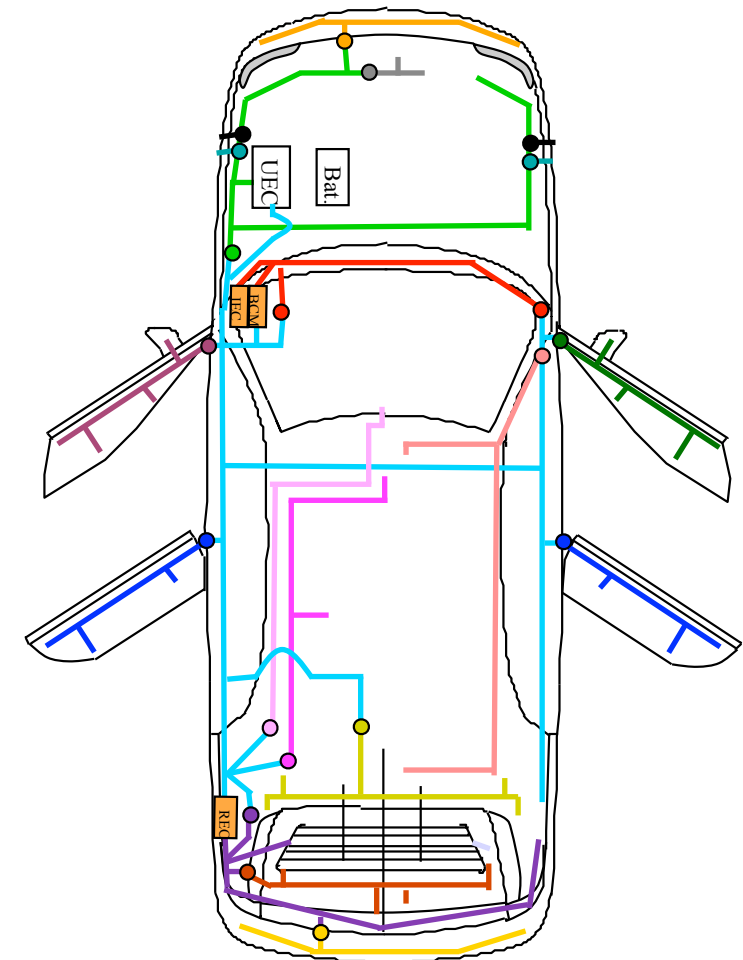
### Body - Harnesses partitioning GMNA UP LVL TRACKING MODEL

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. - IP 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. - TLP WRG	0,2880	0,5445	41	40,07
W.H. - R/WDO DEFR RR	0,0062	0,0118	1	0,26
W.H. - SUSP ACTR WRG	0,0059	0,0112	2	0,41
<b>Total Epsilon II</b>	<b>13,0031</b>	<b>24,9469</b>	<b>1035</b>	<b>1457,85</b>



### Body - Harnesses partitioning BUICK POPULAR EQUIPPED TRACKING

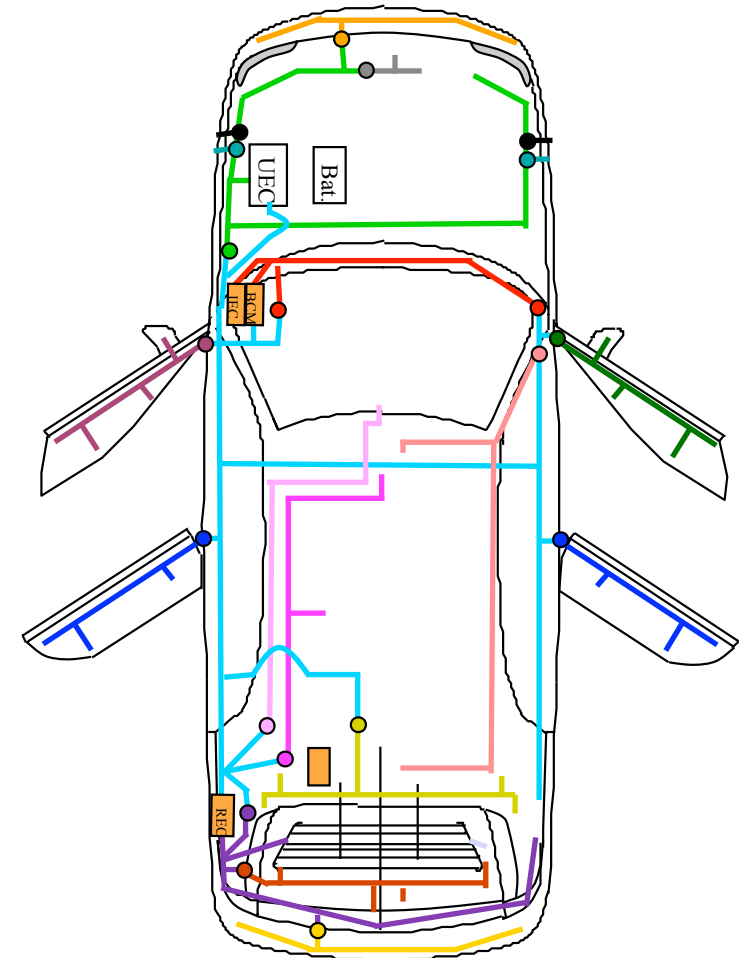
Description	Copper [kg]	Estimated Weight [kg]	Cut Leads	Wires Length [MT]
W.H. - FRT FOG LP WRG	0,0885	0,1673	6	7,08
W.H. - ENG COOL WRG	0,1826	0,3453	9	12,05
W.H. - HDLP WRG	1,6897	3,1947	101	161,61
W.H. - FRT WHL SPD SEN ABS	0,0042	0,0079	2	0,29
W.H. - AC GROUND BATTERY	0,0960	0,1815	1	0,40
W.H. -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





### 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. - IP 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 VEW 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. - TLP 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
<b>Total Epsilon II</b>	<b>18,7329</b>	<b>35,7860</b>	<b>1410</b>	<b>2080,91</b>

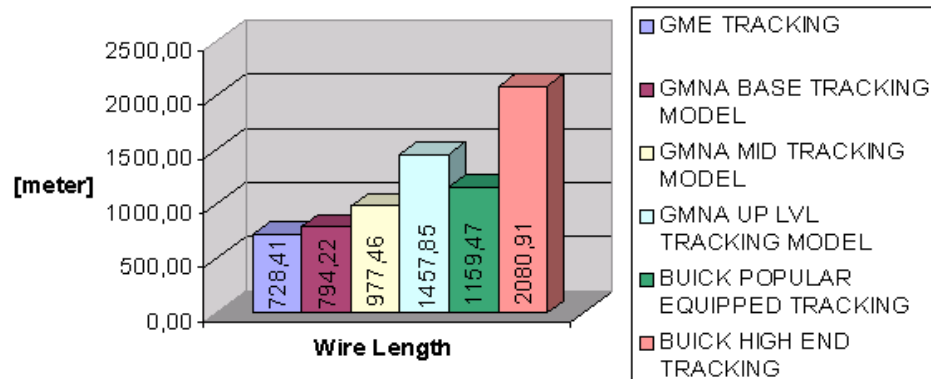


# Wiring harness analysis all tracking vehicles

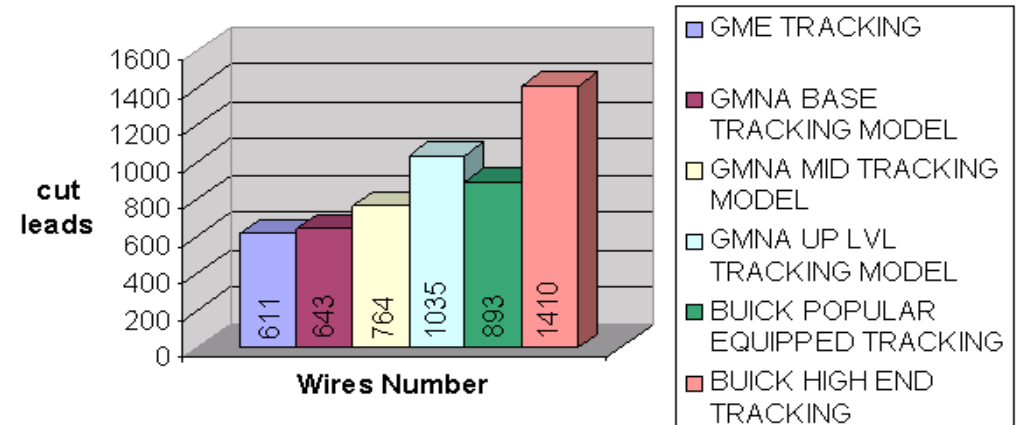
## Epsilon II

Technical review May, 23rd 2005

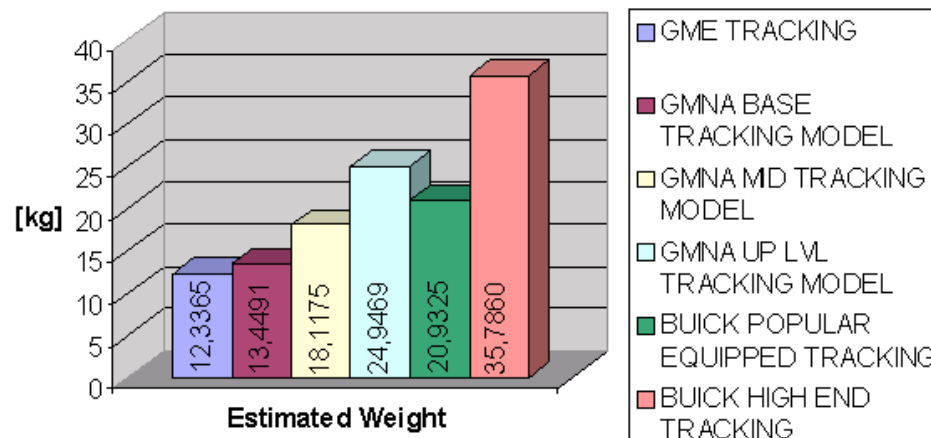
**Comparison of Total wire length for Epsilon II Tracking Vehicles**



**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**

