

TABLE 1.—*Weight composition of modern automobiles*

Category and subgroup	Ratio: (component weight)/(curb weight)	
	Average value	Least value
Body:		
Basic structure.....	0.30	0.25
All trim.....	.16	.13
Glass.....	.04	.035
Engine.....	.145	.12
Automatic transmission.....	.05	.04
Suspension: ¹		
Front.....	.035	.03
Rear.....	.03	.025
Wheels.....	.027	.023
Tires.....	.028	.025
Brakes.....	.04	.035
Steering apparatus.....	.017	.013
Rear axle, driveline ¹	.038	.03
Exhaust system.....	.015	.012
Battery, electrical.....	.02	.012
Radiator, full ²	.013	.008
Fuel tank, full.....	.042	.033

¹ Front-engine, rear-drive models only.² Water-cooled engines only.

Figure 2 shows this undifferentiability either from the interior or the exterior of the car.

Eliminating those components that are not required in electric-motor propulsion would at first give the weight composition of electric cars shown in the left-hand column of table 2. It is assumed that the least-value ratios from table 1 represent the better engineered product in current demand. But there are advantageous side effects on each of these components in going to battery operation and electric motors. Some of the weight reductions and alterations applicable to each category are also enumerated in table 2, with an estimate of the weight fraction decrease. The right-hand column shows the finally altered component weight of electric cars as portions of curb weight.