

AN UNDER-THE-HOOD, BEHIND-THE-DASH LOOK AT HOW CARS WORK

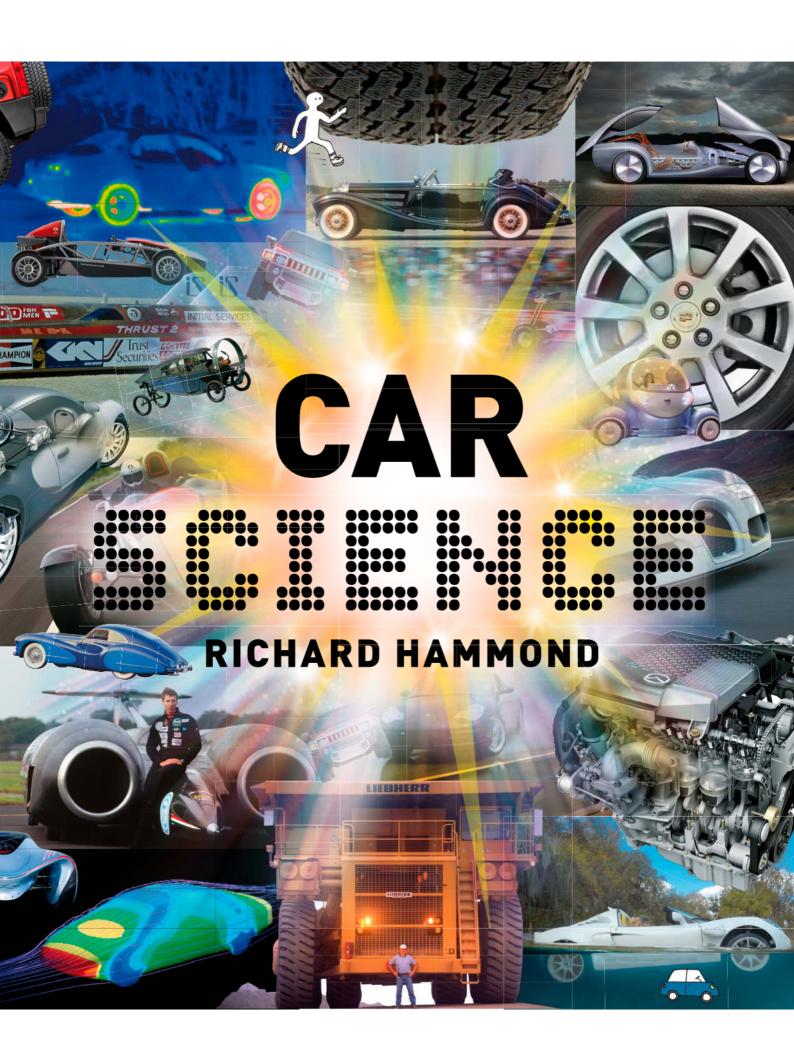
RICHARD HAMMOND

CAR









Contents



1 Power

Goodbye norse!	10
Energy	12
What makes it go?	14
Fire power	16
Pulling power	18
Superpower	20
Step on the gas (or air)	22
Piston power	24
Bugatti Veyron	26
Black gold	28
Making gasoline	30
Laws of motion	32
Magnifying forces	34
Getting in gear	36



2 Speed

The need for speed	40
Acceleration	42
Small is good	4 4
Ariel Atom	46
Inspired by nature	48
The science of airflow	50
Doggard brookers	5 2



3 Handling

Science iriction	50
Black magic	58
All-terrain vehicle	60
Monster trucks	62
Keep on moving	64
G-force	66
In the hot seat	68
Wall of death	70
Friction vs. inertia	72
Losing your grip	74
Car-crash science	76



4 Technology

What's it made of?	80
Electric dreams	82
Fuel-cell cars	84
Design for life	86
Super scuba	88
Top 10 crazy ideas	90
Glossary	92
Index	96