Dacia Spring

EXTREME 65 ELECTRIC FWD AUTOMATIC

Sustainability Rating

2025 ★★★★★ 100%

Clean Air
10.0 /10

Energy Efficiency
10.0 /10

Greenhouse Gases
10.0 /10

Driving Experience

Consumption & Range
ADEQUATE

Cold Winter Performance
POOR

Charging Capability
ADEQUATE

Our verdict

The new Spring, Dacia's supermini, is the first car to achieve 100% in Green NCAP's rating. Tested here is the 48 kW version. The vehicle is designed for urban use and its sustainability analysis profits from its minimalism – the car weighs only 979 kg and features a very small battery of 27.6 kWh usable capacity. The light weight and the small battery are advantageous for all indices. The measured consumption values are not as low as could be expected for such a vehicle, which might be the consequence of compromises with powertrain and heating system efficiency.

- The Spring has no tailpipe emissions and scores top marks for tyre and brake abrasion due to its low weight and rear drum brakes. Production and energy supply emissions are below Green NCAP thresholds.
- While generally low, the in-lab measured energy use is higher than expected for such a small car. The on-road test, however, showed very low consumption of 15 kWh/100 km in the mixed scenario and only 11.7 in the short urban trip.
- The Spring's small size, low mass and tiny battery earn it full points. Lifecycle emissions are 90.4 g CO_2-eq./km, of which 50 come from the car's production in China. Europe's relatively clean electricity mix supports its performance.

Disclaimer

Think before you print

Clean Air

10.0 /10

Comments

The Spring has no tailpipe emissions and scores maximum points on tyre abrasion due to its very low weight. Additionally, the strong brake energy recuperation in normal conditions and the use of drum brakes on the rear axle, which do not allow brake dust to enter the environment, ensure a top performance in brake abrasion reduction as well. The pollutant emissions associated with the production of the vehicle and its battery, as well as those related to the supply of the electric energy, are below the lower Green NCAP thresholds.

Exhaust emissions

Exhaust pollutant emissions are produced from combustion engines. Although current emission legislation is very strict, this type of emission directly affects air quality, and not all vehicles perform equally well. Read more

GOOD ● **10.0** /10

In laboratory

Green NCAP performs a wide range of tests on cars in the laboratory. This is the best way to ensure controlled conditions and guarantee that all cars are tested in the same way, making their results comparable. Read more

GOOD ● **10.0** /10

	NMHC	NO_x	NH_3	CO	PN	PM	Score
Legal test (WLTP)	○	●	○	●	○	●	8.0 /8
Warm weather	●	●	●	●	●	●	10.0 /10
Highway	●	●	●	●	●	●	10.0 /10
Winter cold start	●	●	●	●	●	●	10.0 /10
Winter warm start	●	●	●	●	●	●	10.0 /10

On road

An on-road driving test , using portable emissions measuring equipment complements Green NCAP's laboratory tests. Read more

GOOD ● **10.0** /10

	NMHC	NO_x	NH_3	CO	PN	PM	Score
Real-world mixed drive	○	●	○	●	●	○	10.0 /10
Short city trip	○	●	○	●	●	○	10.0 /10
Congestion	○	●	○	○	○	○	2.0 /2

● good ● adequate ● marginal ● weak ● poor ○ not applicable

Clean Air

10.0 /10

Non-exhaust emissions

Driving a vehicle also produces emissions different from those of the exhaust pipe. Green NCAP evaluates vehicle properties that contribute to tyre and brake abrasion.

GOOD ● **10.0** /10

Tyre wear

Tyre abrasion releases small particles during driving, and some vehicle properties have major impact on it. Heavier vehicles, wheel alignment causing increased slip angle, and aggressive acceleration responses all increase tyre wear and particle emissions. Read more

GOOD ● **6.0** /6

	Result	Score
Influence of mass	●	3.0 /3
Wheel alignment	●	1.0 /1
Accelerator response	●	2.0 /2

Brake wear

Brake dust, produced by friction brakes, can be mitigated through filters, enclosed brake systems (like drums), or by reducing friction brake use with regenerative braking in electrified vehicles. Containment keeps dust inside the system, while recuperation lowers brake wear. However, heavier vehicles still generate more brake abrasion due to their greater stopping demands. Read more

GOOD ● **6.0** /6

	Result	Score
Brake dust mitigation	●	0.0 /4
Brake dust containment	●	3.0 /6
Recuperative braking - warm test	●	6.0 /6

● good ● adequate ● marginal ● weak ● poor ● not applicable

Clean Air

10.0 /10

Additional Life Cycle Assessment information

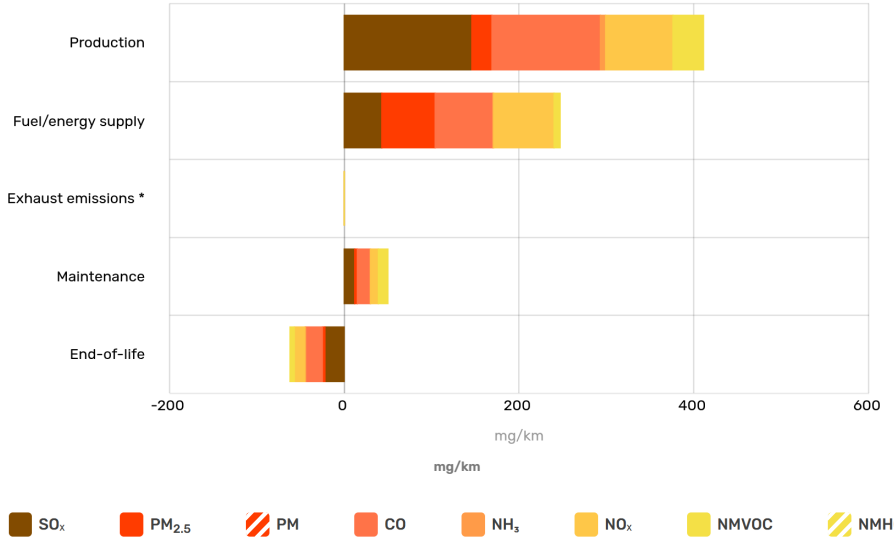
Life Cycle Assessment (LCA) investigates the environmental impact of a car over its entire lifetime, 'from cradle to grave'. In this section, pollutants are estimated in the various stages of a vehicle's life other than use. The chart also displays the measured emissions related to usage, which are taken as an average from the tests and are scored separately in the 'Exhaust emissions' part above. The end-of-life approach uses results in negative values because the benefit of materials recovery and recycling exceeds the effort of obtaining and processing virgin raw materials.

GOOD

10.0 /10

Pollutants

Most of the vehicle exhaust pollutant species are also emitted in others life cycle phases. These are health- and nature-damaging compounds, the amount of which should be reduced as well.



* Exhaust emissions are not contributing to the score in Additional Life Cycle Assessment information because they are scored in the Exhaust emissions section above

good | adequate | marginal | weak | poor | not applicable

Energy Efficiency

10.0 /10

Comments

The consumption values are low but, surprisingly, more could have been expected by a vehicle of such size and mass. The light weight certainly helps, but the electricity use could have been lower, as Green NCAP has observed with other city and supermini vehicles. The numbers include the charging and discharging losses of home charging. None of the in-lab test consumption values is as low as the 13.3 kWh/100 km from the legal test. Naturally, the Highway Test increases the demand, although the car did not reach a speed higher than 125 km/h. The energy demand difference is low between the cold and warm start winter tests at -7°C. A PTC heater is used for the heating. The on-road test showed very low consumption of 15 kWh/100 km in the mixed scenario and only 11.7 in the short urban trip. The energy needed in the other life cycle phases is low and in total the car's lifetime primary energy demand stays below the thresholds.

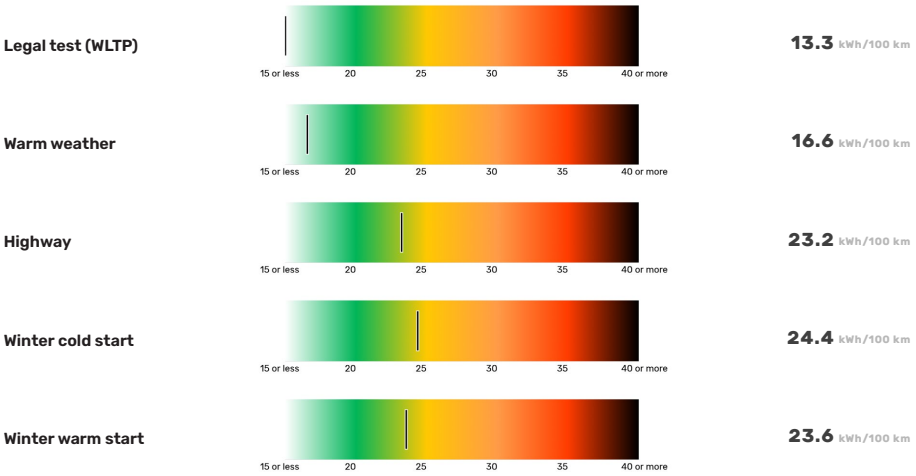
Energy demand

GOOD **10.0** /10

Propulsion energy consumption in laboratory

GOOD **10.0** /10

The vehicle's measured consumption figures are displayed in the bar chart. The colour scheme positions the values relative to low and high figures in a typical range. The ranges are different for combustion engine and pure electric vehicles.



good adequate marginal weak poor not applicable

Energy Efficiency

10.0 /10

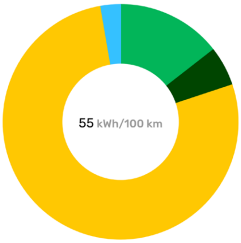
Additional Life Cycle Assessment information

GOOD

10.0/10

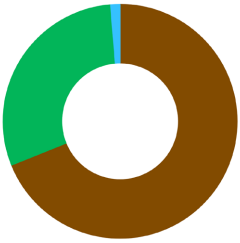
Life Cycle Assessment (LCA) investigates the environmental impact of a car over its entire lifetime 'from cradle to grave'. In this section, the total vehicle life cycle primary energy demand is displayed. The scoring does not consider the direct propulsion energy use, because it is scored separately in the 'Propulsion energy consumption in laboratory'.

Total LCA energy consumption



- Production & recycling 14.5%
- Battery production 5.4%
- Fuel/energy supply * 77.4%
- Maintenance 2.7%

Energy source share in total LCA consumption



- Fossil 68.9%
- Renewable 29.8%
- Other 1.3%

Direct propulsion energy share is not shown, it is included in 'Fuel/energy supply'.

Rolling resistance

Rated here is the vehicle's resistance to movement at low speeds. Different factors have an impact on it, but the most significant one is mass.

GOOD

10.0/10

good adequate marginal weak poor not applicable

Greenhouse Gases

10.0 /10

Comments

The relatively low consumption figures, the small size and the low mass, as well as the very small battery ensure the Spring collects all points in this index, as well. The total life cycle greenhouse gas emissions are calculated to 90.4 g CO_2-eq./km, of which 50 are contributed by the vehicle production in China. The comparably low greenhouse gas intensity of average European electricity generally benefits all electric cars.

Exhaust GHG emissions

Combustion of conventional fuels releases greenhouse gases at the vehicle's tailpipe. The most significant of these gases are the emissions of CO_2. Green NCAP's assessment considers methane (CH_4) and laughing gas (N_2O) as well. Together, these are counted with their global warming potential to a sum known as CO_2 equivalent.

GOOD **10.0** /10

In laboratory

Green NCAP performs a wide range of tests on cars in the laboratory. This is the best way to ensure controlled conditions and guarantee that all cars are tested in the same way, making their results comparable. Read more

Legal test (WLTP)	90 or less 100 110 120 130 140 150 160 170 180 190 200 or more	**0.0** g CO_2-eq./km
Warm weather	90 or less 100 110 120 130 140 150 160 170 180 190 200 or more	**0.0** g CO_2-eq./km
Highway	90 or less 100 110 120 130 140 150 160 170 180 190 200 or more	**0.0** g CO_2-eq./km
Winter cold start	90 or less 100 110 120 130 140 150 160 170 180 190 200 or more	**0.0** g CO_2-eq./km
Winter warm start	90 or less 100 110 120 130 140 150 160 170 180 190 200 or more	**0.0** g CO_2-eq./km

good adequate marginal weak poor not applicable

Greenhouse Gases

10.0 /10

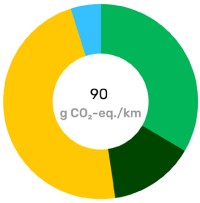
Additional Life Cycle Assessment information

Life Cycle Assessment (LCA) investigates the environmental impact of a car over its entire lifetime, 'from cradle to grave'. In this section, the total vehicle life cycle greenhouse gas emissions are displayed.

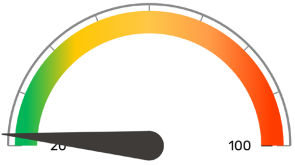
ADEQUATE

8.4 /10

Total LCA GHG emissions



- Production & recycling 33.5%
- Battery production 14.2%
- Tailpipe emissions * 0.0%
- Fuel/energy supply 47.5%
- Maintenance 4.9%



tonnes CO_2-equivalent/vehicle

Vehicle Life Cycle average emissions **22** (+/-)
(best **18** | worst **24**)

* The scoring does not consider the direct exhaust GHG emissions at the tailpipe, because they are scored separately in 'Exhaust GHG emissions' above.

good adequate marginal weak poor not applicable

Driving Experience

Consumption & Range

ADEQUATE

Cold Winter Performance

POOR

Charging Capability

ADEQUATE

Green NCAP Comment

The Spring is positioned in the low-end price range and this might become visible in some aspects of daily use. Tested here is the top trim 'extreme', which brings the highest equipment level.

- The estimated warm weather real-world consumption values of the Dacia are all in the 'adequate' range which is, as stated for the Energy Efficiency Index, rather surprising for such a small and light vehicle. Due to the relatively low additional energy use for heating, the winter consumption estimations show 'good' values in urban and mixed driving, which eventually turns the overall result in this section to 'good'. However, with a battery that small, all estimated driving ranges are 'poor', meaning that users should plan their trips and charging opportunities carefully. The consumption readings on the board computer display are good enough.
- The Spring does not make any noteworthy winter driving range benefit of preheating while plugged, due to the small battery and the little difference between the cold and warm start winter tests. The heating is manually controlled and it needs to work at its maximum or close to it at most of the time to provide thermal comfort at -7°C. The small Dacia surprisingly reached very quickly the 16°C target temperature in front and rear head area, but neglected the footwell. The front compartment needed significantly more than the duration of one entire test to get to the target temperature, while the rear foot area did not reach it at all. The Dacia cannot be equipped with any additional heating functions and only relies on its PTC heater. A highlight in the top trim version is the possibility to schedule or remotely activate the cabin heating. The cabin thermal insulation is evaluated as 'poor'.
- At home AC charging, the vehicle could take approx. 7 kW and demonstrated a slightly below standard grid-to-battery output efficiency of 86.3%. Fast charging is not its strength, as it could only reach a maximum DC power of 34 kW and needed 40 minutes to recharge from 10 to 80% SoC. Given the small battery, the recharged range per minute is also minimal. However, the top version of the Spring offers an unexpected nice-to-have function of vehicle-to-load 230 V energy supply for external devices of up to 3.7 kW power. Along with the Hyudai Inster , the Spring demonstrates that this feature should not be reserved only for premium high-power vehicles, and can contribute to a better user experience.

Consumption & Range

ADEQUATE

Estimated actual consumption

GOOD

What consumption can be expected in real world conditions?

In-laboratory measured consumption values are only partially representative of real-world use. Green NCAP's estimates aim at providing more realistic figures, which are based on measured results, modified by correction factors.

Conditions	Urban	Rural	Highway	Mixed	
Warm weather	16.8	17.3	20.0	17.7	kWh/100 km
Cold Winter	23.6	20.9	26.9	24.0	kWh/100 km

Driving range

POOR

What driving range can be expected in real world conditions?

Of special importance to consumers is the real-world driving range of electric vehicles. Green NCAP estimates this based on measured data, modified by correction factors.

Conditions	Urban	Rural	Highway	Mixed	
Warm weather	190	185	160	180	km
Cold Winter	135	153	119	133	km

Accuracy of display

ADEQUATE

Is the consumption figure on the display correct?

good adequate poor not applicable

Cold Winter Performance

POOR

Driving range benefit of pre-warming

POOR

How much further can you drive in winter, if the car is pre-warmed?

A cold vehicle has increased energy consumption at the start of its trip, mostly due to the cabin heating demand. Pre-warming the car while it is plugged, when possible, can significantly benefit its driving range in cold weather conditions. Green NCAP's winter tests are performed at -7°C.

Type	Driving Range Benefit	Result
Urban trip	+14 km	
Mixed trip	+4 km	

Cabin heating

ADEQUATE

Does the vehicle get warm quickly in winter?

This indicates the time needed to reach 16°C in seconds at different positions in the cabin after the cold vehicle has been started at -7°C ambient temperature.

	Front	Rear
Head area	175 s	386 s
Footwell	2,660 s	

The target temperature in the front and rear footwell was not reached during the test.

good adequate poor not applicable

Cold Winter Performance

POOR

Additional heating functions

What functions can be used to improve heating comfort?

Unlike a combustion car, which usually uses the engine's waste heat to provide warmth to the cabin, in electric vehicles, the energy needed comes from the battery. Therefore, there is a trade-off between thermal comfort and energy consumption. Some additional heating functions can deliver good thermal comfort performance at lower energy use compared to heating up the entire cabin. If they can be scheduled or remotely activated before a trip, while the vehicle is still plugged, both comfort and driving range can be notably improved.

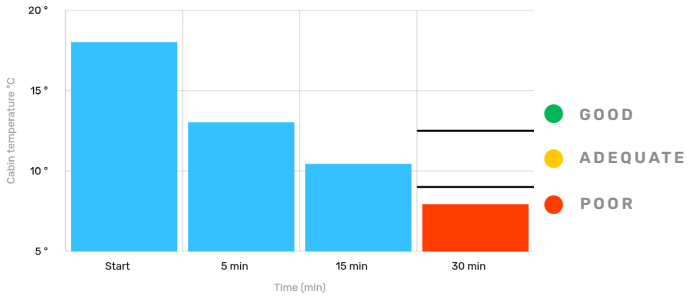
	Y/N	Fitment
Heat pump	✗	
Seating heating front	✗	
Seating heating rear	✗	
Steering wheel heating	✗	
Sheduled pre-heating of seats	✗	
Scheduled steering wheel pre-heating	✗	
Scheduled cabin air pre-heating	✓	Standard for the tested version
Smart cabin heating management	✗	

Cabin thermal insulation

POOR

How well does the cabin maintain its temperature?

Assessed here is the average cabin temperature drop after 30 minutes, starting from 18°C when the outside temperature is -7°C and the vehicle is inactive.



good adequate poor not applicable

Charging Capabilities

ADEQUATE

Battery pre-conditioning

Does the vehicle have the ability to optimize the battery temperature for fast charging?

Fast charging is quicker when the battery temperature is in a certain range, and many vehicles possess the function to actively prepare for a coming fast charging event. Most use the charger destination in the navigational system to control the process, and some would offer a manual activation function.

	Manual	Automatic
Battery pre-conditioning	✕	✕

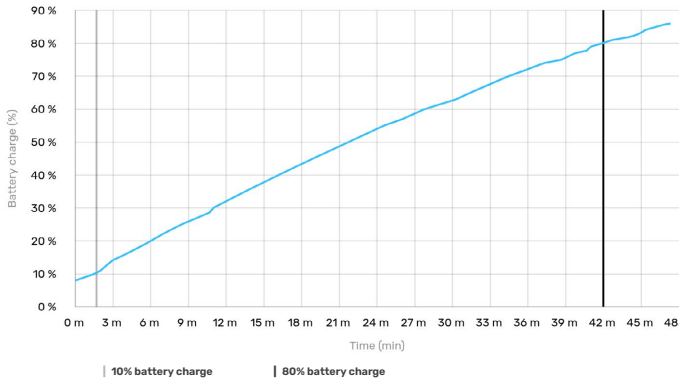
Fast charging

POOR

Green NCAP's fast charging test verifies the vehicle's ability to recharge fast, which is crucial at long trips or tight schedules. Although constantly improving, not all vehicles offer the same capabilities.

Charging time

How quickly can the battery charge?



good adequate poor not applicable

Charging Capabilities

ADEQUATE

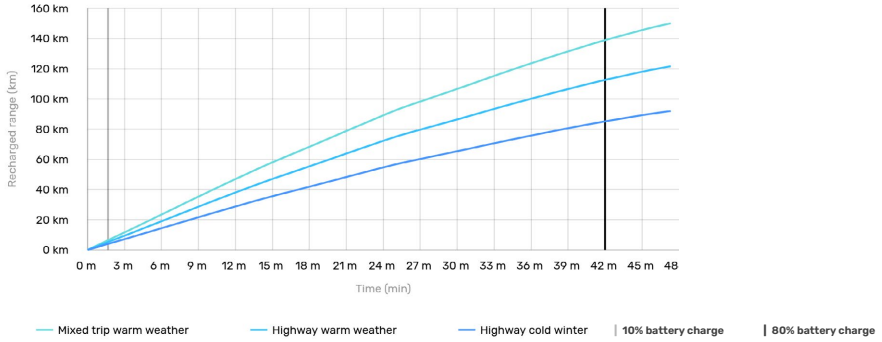
Fast charging

POOR

Green NCAP's fast charging test verifies the vehicle's ability to recharge fast, which is crucial at long trips or tight schedules. Although constantly improving, not all vehicles offer the same capabilities.

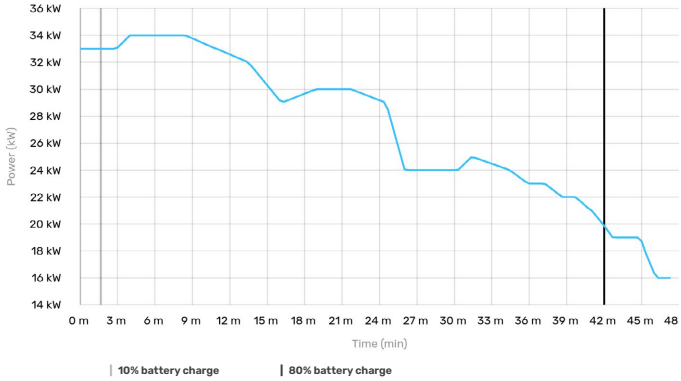
Recharged range gain per charging time

How long do you need to fast charge to drive a certain distance?



Charging power

How quickly does energy flow into the battery, depending on its charge level?



good adequate poor not applicable

Charging Capabilities

ADEQUATE

Home charging efficiency

ADEQUATE

Is charging at home efficiently utilizing the energy withdrawn from the grid?

The assessed efficiency value is the grid-to-battery-output efficiency, which describes what share of the energy taken from the electricity grid is available for the vehicle to use for propulsion and other auxiliary functions. The value encompasses not only the charger efficiency but considers several other losses as well.

Home charging efficiency	**86** %	
Maximum home charging power	**7.0** kW	Optional

Bidirectional charging

ADEQUATE

How capable is the vehicle of supplying energy from its battery to other devices or systems?

Bi-directional charging is available in some vehicles and is gaining increasing popularity. It comes with different power and functionality levels. However, battery usage for purposes additional to regular vehicle driving and charging might be disadvantageous for its durability and manufacturers might introduce limitations to protect it.

Power output

3.7 kW

Fitment: Standard for the tested version

Compatibility

✓ **Vehicle-to-Load (V2L)**
The inlet or the interior socket can provide AC power through an electrical domestic socket.

✗ **Vehicle-to-Household (V2H)**
The vehicle can provide power to a household through a charger.

✗ **Vehicle-to-Grid (V2G)**
The vehicle can return power to the grid.

Fitment: Standard for the tested version

Grid integration

✓ **Basic**
No integration (just a socket for a stand-alone load). No scheduling option. Very basic visualisation.

✗ **Limited**
Energy management system through the vehicle app (timers availability and power monitoring). Dedicated interface in the car, with mobile app monitoring.

✗ **Advanced**
Advanced settings available such as tariff and consumption control, linked to distributor energy prices. Advanced real time energy flow visualization. AI powered suggestions for optimal usage.

good adequate poor not applicable

Specifications

Vehicle class
City and Supermini

System power/torque
48 kW/113 Nm

Engine size
n.a.

Declared consumption
13.3 kWh/100 km

Declared driving range
Overall 228 km
City 336 km

Declared CO_2
n.a.

Declared battery capacity
Usable (net) 27.6 kWh
Installed (gross) 28.6 kWh

Mass
979 kg

Heating concept
PTC heater

Tyres
165/70 R14

Emissions class
AX

Tested car
UU1DBG008RU17xxxx

Publication date
11 2025

Also covered by this rating

Variants

Dacia Spring
65 expression electric FWD automatic

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65 essential electric FWD automatic