

transit connect electric

Driving a world of difference in a light-duty electric vehicle.



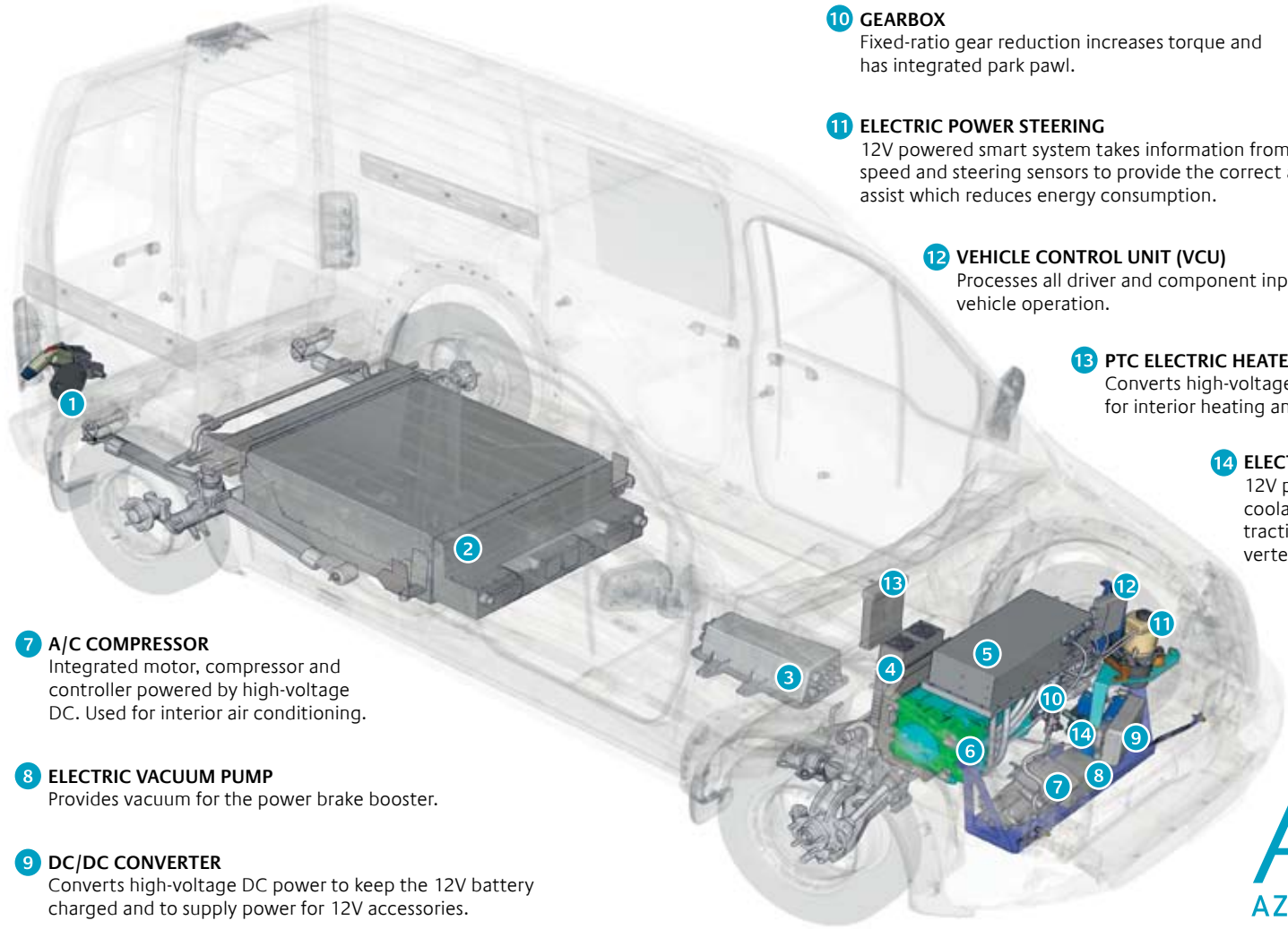
The 2010 Ford Transit Connect—North American Truck of the Year.

Azure Dynamics Corporation (AZD) and Ford Motor Company have joined in a collaborative effort to deliver the Transit Connect Electric for North America and Europe.





force drive™ components



1 LEVEL 2 CHARGE PORT
The vehicle is connected to the electrical grid through this port when charging. Capable of 120V or 240V AC charging.

2 HIGH-VOLTAGE BATTERY
Liquid cooled 28 kWh lithium-ion battery pack with internal sensors and controller.

3 HIGH-VOLTAGE JUNCTION BOX
Distributes DC power from battery to components and contains high-voltage fuses.

4 LEVEL 2 CHARGER
Uses 120V or 240V AC input from charge port. Converts AC power to DC power to charge battery in 6 to 8 hours at 240V.

5 MOTOR CONTROLLER & INVERTER
Converts DC from the battery to 3 phase AC for the traction motor. Controls the speed and torque of the traction motor.

6 TRACTION MOTOR
Converts electrical energy to wheel torque. Speed & torque outputs are based on accelerator input.

7 A/C COMPRESSOR
Integrated motor, compressor and controller powered by high-voltage DC. Used for interior air conditioning.

8 ELECTRIC VACUUM PUMP
Provides vacuum for the power brake booster.

9 DC/DC CONVERTER
Converts high-voltage DC power to keep the 12V battery charged and to supply power for 12V accessories.

10 GEARBOX
Fixed-ratio gear reduction increases torque and has integrated park pawl.

11 ELECTRIC POWER STEERING
12V powered smart system takes information from vehicle speed and steering sensors to provide the correct amount of assist which reduces energy consumption.

12 VEHICLE CONTROL UNIT (VCU)
Processes all driver and component inputs in order to control vehicle operation.

13 PTC ELECTRIC HEATER
Converts high-voltage DC power to heat. Used for interior heating and windshield defrosting.

14 ELECTRIC COOLANT PUMPS
12V powered pumps circulate coolant through battery pack, traction system, DC/DC converter and heat exchanger.



battery electric attributes

AZD FORCE DRIVE™ BATTERY ELECTRIC SYSTEM

- 28 kWh, lithium-ion battery (supplied by Johnson Controls)
- Driving range: 50 to 80 miles (depending on auxiliary usage and drive cycle)
- Charge time: 6 to 8 hours with 240V/30A supply
- Max speed: 75 mph
- Able to ascend up to 20% grade
- Ambient operational temp: -30° F to 120° F*

* Some power reduction may occur above 110° F and lower temperatures require pre-conditioning.

Ford transit connect attributes

- GVWR: 5,005 lbs
- Maximum payload: 1000 lbs (estimated)
- 114.6 in. wheelbase and high roof
- Over 135 cu. ft. of cargo space
- 2 sliding side doors, 2 swinging rear doors
- Low side and rear load floor
- AdvanceTrac® with RSC® (Roll Stability Control™)
- Standard front and front seat-side airbags
- Standard Tire Pressure Monitoring System
- 39-ft. curb-to-curb turning radius
- Cargo vans have seating for 2 and an open cargo box

sales inquiries

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