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*Ride control innovation, accelerated<sup>SM</sup>*

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# *Forward thinking. Forward moving.*

*Where transportation goes for innovation*

Today's consumers want it all from their suspensions systems – the comfort of a luxury vehicle combined with the handling of a sports car. With Tenneco's next generation Active Suspension Car (ACOCAR™), they get exactly what they are looking for – superior handling, safety and comfort – without having to sacrifice anything.

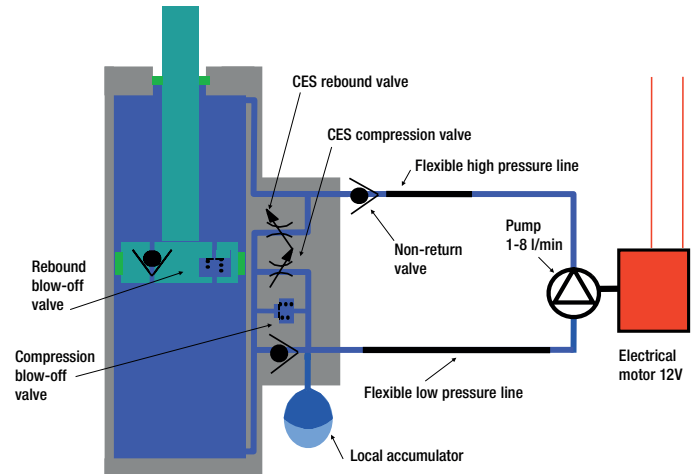


through the shock absorbers whose damping valves can each be closed independently to make the car body move up when it would otherwise be moving down and vice versa. In this way the system works to keep the car body flat at all times while controlling wheel movements to improve tire to road contact.

ACOCAR™ is the next generation of advanced and innovative Tenneco suspension systems – a fully active system which provides ultimate comfort for the driver combined with excellent handling.

Hydraulic pumps have been added to the shock absorbers. These bring energy to the suspension, resulting in better control of damping and spring forces. Additionally, oil is constantly circulated

The addition of a pump at each corner means the system does not depend on the movement of the wheels to generate damping force. The result is that the ACOCAR™ system controls roll, pitch and heave, therefore providing superior handling, safety and comfort.



- 1 Actuators with 2 integrated CES valves (rebound and compression)
- 2 Electro-hydraulic power packs, operating at 12V
- 3 Accumulators
- 4 ECU, height sensors and accelerometers

## ACOCAR™ FEATURES & BENEFITS



- Ultimate comfort combined with excellent handling
- Lightweight aluminum design
- Low power consumption (+/- 100W measured on normal roads)
- Allows “eco” driving mode with virtually no power consumption
- Provides optimum body control
- Improves harshness and plushness
- Active roll compensation without impacting comfort
- No weight increase compared to a semi-active suspension system
- Easy packaging (no roll bars, no hydraulic lines between corners)



## Partnership Built on Performance

At Tenneco, we don't simply provide a product. We provide a partnership—taking into account customers' entire systems, their unique needs and applications, technology requirements, market challenges and goals. With ACOCAR™ and our complete line of ride control solutions, we offer the partnership that drives the innovation that maximizes performance and enables true ride control.

### PIONEERS IN RIDE CONTROL

At Tenneco, innovation is a hallmark of everything we do. In our advanced ride control technologies and solutions. In our unique, total-system integration expertise and approach. In our commitment to partnership and collaboration. We're always looking beyond the technology horizon to foresee and develop the next-generation ride control solutions that accelerate our customers' success and keep them moving toward the future.

From development through delivery and beyond – we help our partners drive transportation innovation, full speed ahead.

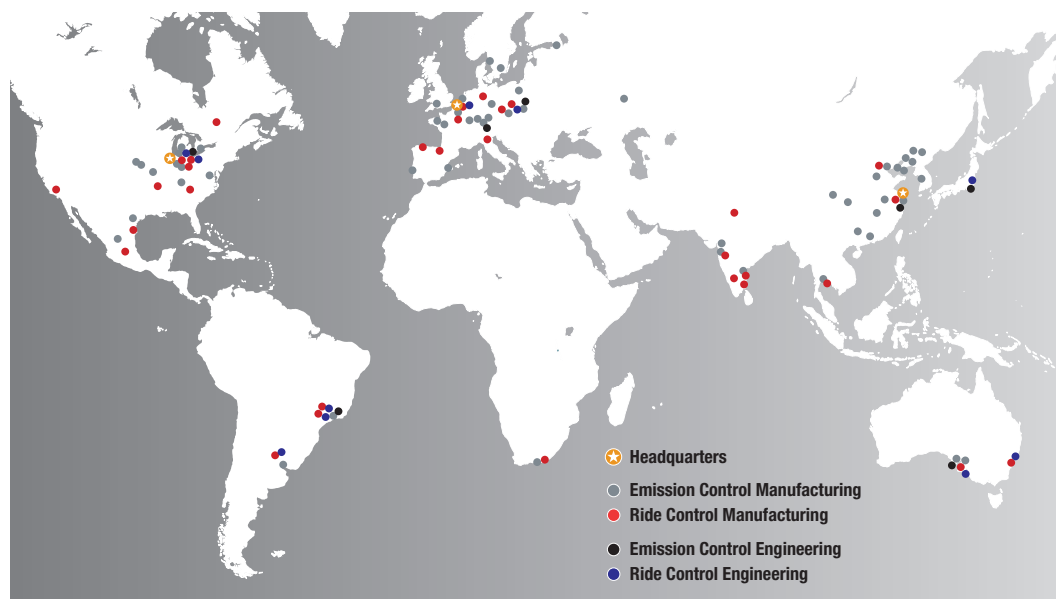
### TENNECO IS EVERYWHERE OUR CUSTOMERS NEED US

Our reach is global, but our focus is local, helping customers in each region adapt our global capabilities and technologies for local applications.

- 22,000 people
- More than 80 manufacturing facilities
- 14 state-of-the-art research and development centers
- 3 dedicated research and development centers for ride control engineering

#### Markets served:

- Light vehicle
- Motorcycle
- Bus and truck
  - Axle suspension
  - Cabin suspension
  - Seat suspension



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