

FOUR WHEEL STEERING SYSTEM FOR FUTURE

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ABSTRACT

A Four Wheel steering (4WS) System is also known as “Quadra Steering System”. In this paper, both front as well as rear wheels can be steered according to speed of the vehicle and space available for turning. Quadra steer is system that gives full size vehicles greater ease while driving at low speed, and improves stability, handling and control at higher speed.

Quadra steering system works in following three phases Negative phase, Neutral phase, Positive phase. It enables the car to be steered into tighter parking spaces. It makes the car more stable at speed (less body roll). It makes the car more efficient and stable on cornering, easier and safer lanes change when on motorways. The steering system allows the driver to guide the moving vehicle on the road and turn it right or left as desired. The main aim is that turning of the vehicle should not require greater efforts on the part of the driver.

The Quadra steer steering system offers a 21% reduction in turning radius. So if a vehicle is capable of making a U-turn in a 25-foot space, Quadra steer allows the driver to do it in about 20 feet.

KEYWORDS: Quadra, Negative Phase, Neutral Phase, Positive Phase.