

# Design and Fabrication of Four-Wheel Steering System

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**Abstract:** Automobile industry is one of the most important segments for a country's growth. India facing its own challenges due to its huge and varied transport sector. These challenges may be overwhelmed by using energy efficient advancements with the customer focused approach. The driver always driving the automobile with sophisticated technologies and should feel very comfortable. Automobile moving higher than the cruising speeds stability of the vehicle is the key factor. In four-wheel navigation system the tail wheels turning opposite to the forward-facing wheels while vehicle moves at high speeds instability chances are more. To avoid this instability rear wheels follows the same track of the forward-facing wheels while tuning of the all-wheel steering system. This paper focusing light on to the difficulty faced when all wheel steering system taking a turn in a very confined space. By switching from two-wheel steering to four-wheel steering owing to this the driver on the way to make turns in small radius. It also laidback for parallel parking and maneuvering the vehicle quite with no trouble on highways. In command to succeed this, a mechanism established with the two bevel gears and intermediary shaft, which transfer 100% rotating force as well turns tail wheels in out of period. The spiraling radius of the automobile with two steering wheel system is 4400 mm after switching to four-wheel steering system radius is 2596mm only. Hence, radius reduced to 1804 mm.

**Keywords:** Steering System, Trundle, Navigating, Bevel Gears, Torque and Shaft, etc.

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