

MARKET POTENTIAL STUDY FOR AUTOMOTIVE GAS SPRINGS FOR CARS AND BUSES IN COIMBATORE CITY AT ROOTS INDUSTRIES INDIA PVT LTD

Mr. N. Ilango, MBA, M.Sc., – Assistant Professor, Department of MBA, Sri Ramakrishna College of Arts & Science, Coimbatore

Mr. Rithick R, Student, Department of MBA, Sri Ramakrishna College of Arts & Science, Coimbatore

ABSTRACT:

This study evaluates the market potential for automotive gas springs for cars and buses in Coimbatore city, conducted for Roots Industries India Pvt Ltd. The research aims to assess current demand, identify key user segments (dealers, mechanics, fleet operators), analyse competitive positioning between branded and local manufacturers, and offer actionable marketing and distribution recommendations. A descriptive and analytical research design was used with non-probability purposive sampling to target respondents directly involved in sales, installation, and procurement of gas springs. Data collection combined structured surveys, dealer interviews, and on-site observations; analysis included frequency distributions, cross-tabulations (chi-square tests), and basic regression to explore demand drivers.

KEYWORDS

Market Potential, Automotive Gas Springs, Cars and Buses, Coimbatore, Roots Industries India Pvt Ltd, Descriptive Research, Dealer Analysis, Demand Assessment, Competitive Benchmarking, Price Sensitivity, Market Segmentation, Product Positioning, Fleet Market, Aftermarket, Marketing Strategy.

INTRODUCTION

The automotive industry in India has witnessed significant growth over the past decade, driven by increasing vehicle production, rising disposable incomes, and expanding transportation infrastructure. Within this ecosystem, automotive gas springs play a crucial role as essential components used for lifting, positioning, and controlling motion in vehicles such as cars, buses, and commercial fleets. These springs are widely used in applications including tailgates, engine hoods, luggage compartments, and passenger seats, contributing to comfort, safety, and operational efficiency.

This research study aims to assess the current demand, application trends, and future growth potential for automotive gas springs in Coimbatore city. It further seeks to identify key dealer and mechanic segments, evaluate price sensitivity and brand perception, and recommend strategic actions in marketing, distribution, and product development for Roots Industries.

OBJECTIVES:

1. To assess current demand and application of gas springs in the automotive sector (cars and buses) in Coimbatore.

2. To identify and analyze key dealer segments using gas springs in the regional market.
3. To study the competitive landscape and benchmark of gas springs.

REVIEW OF LITERATURE:

“Automotive Gas Springs Market Report 2025 (Global Edition)” Author: Sumedha Gosavi

Published: Market Research Report (2025)

Global Automotive Gas Springs market size in 2021 was recorded at \$2,183.1 million; projected to reach \$2,677 million by 2025, growing at a CAGR of 5.23% during 2025–2033.

“Gas Spring for Vehicles Market Research Report 2024” Author: Raksha Sharma.

Published: Market Research Report (2024)

Discusses regional adoption and 2024 market observations for automotive gas springs. **“Gas Spring Market Size, Share and Growth Statistics - 2023 - Fact.MR” Author: Fact.MR**

Published: Market Research Report (2023)

Analyzes the projected expansion of the global gas spring market, driven by demand in automotive and ergonomic furniture applications.

“Gas Spring Market Size, Share & Growth, Trends [2022]” Author: Agatha Christie.

Published: Market Research Report (2022)

The gas spring market size was valued at USD 2,433.19 million in 2024 and is expected to reach USD 3,554.17 million by 2033, growing at a CAGR of 4.3% from 2025 to 2033.

RESEARCH METHODOLOGY:

RESEARCH DESIGN

The research adopts a quantitative, descriptive, and analytical research design. A survey method was employed to gather primary data from automobile spare parts dealers and mechanics to evaluate market demand, preferences, competitive landscape, and growth potential.

SAMPLE SIZE AND SAMPLING METHOD

Sample Size: 60 respondents
30 Spare Parts Dealers
30 Vehicle Mechanics

Sampling Method: Non-probability purposive sampling was used to select respondents who are directly involved with gas spring sales or installations.

RESEARCH TOOLS AND STATISTICAL TECHNIQUES

TOOLS/TECHNIQUE USED:

1. Simple percentage
2. Descriptive statistics

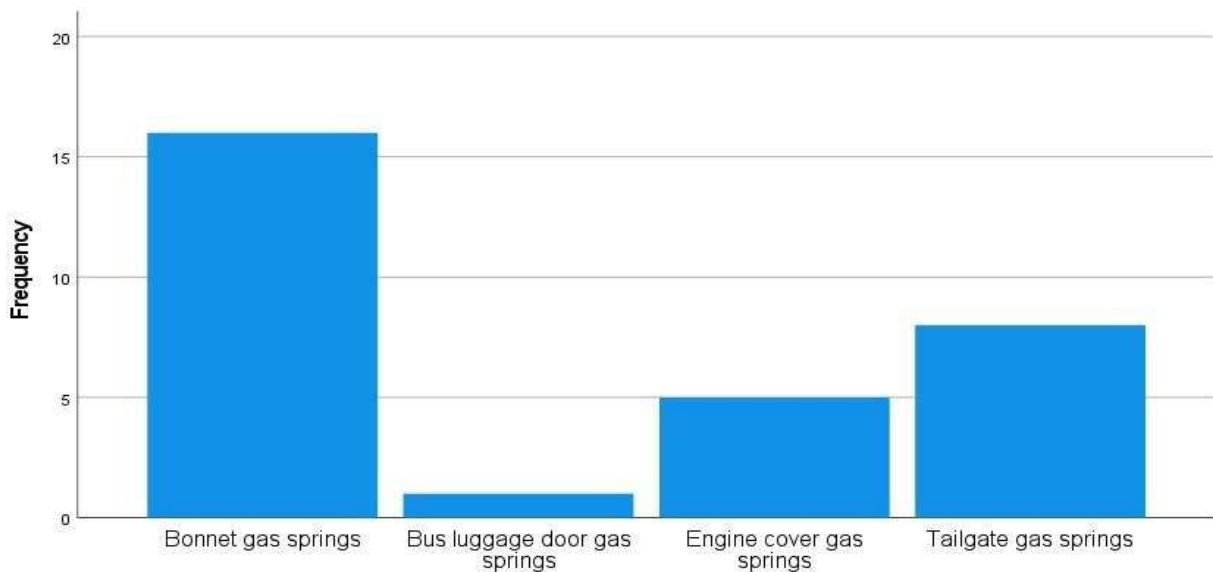
3. Clusteranalysis
4. ChisquareTest
5. IndependentsampleTtest
6. Regression

DATA ANALYSIS AND INTERPRETATION

Table showing the frequency of different gas springs sold by dealers

Types of gas springs	Frequency	Percentage
Bonnet gas springs	16	53.3
Bus luggage door gas springs	1	3.3
Engine cover gas springs	5	16.7
Tailgate gas springs	8	26.7
Total	30	100.0

Chart showing the frequency of different gas springs sold by dealers



INTERPRETATION

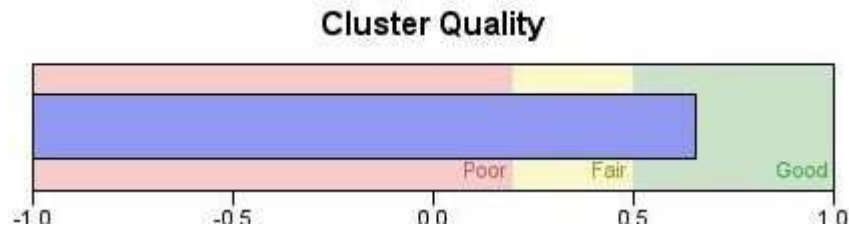
Bonnet gas springs are the most widely used (53.3%), followed by tailgate (26.7%) and engine cover types (16.7%). Bus luggage door gas springs are the least used (3.3%), indicating minimal demand in that segment.

Table showing the cluster analysis of type of area and average gas springs sold in a month

Cluster	Area type	400	900	More than 900	Total responses
Cluster 1	Urban	2	3	1	6

Cluster2	Semiurban	1	4	2	1
Cluster3	Rural	1	2	14	17
Total		4	9	17	30

Chart showing the cluster quality of type of area and average gas springs sold in a month



INTERPRETATION

Most gas springs priced more than ₹900 are found in Rural areas (Cluster3), while Urban and Semi-Urban areas have a mix of lower and moderate prices. This indicates that price distribution varies by area type, with higher prices concentrated in rural regions.

Table showing the categorical variable of new brand offering and brand offering gas springs to dealers

HYPOTHESIS:

Null Hypothesis (H₀):

There is no significant association between the type of brand (ABX, BiBus, Gabriel, Local/Unbranded) and the dealers' response towards new brand offers.

Alternative Hypothesis (H₁):

There is a significant association between the type of brand and the dealers' response towards new brand offers.

CROSSTABULATION

New brand /offers	ABX	Bi bus	Grabriel	Local/ unbranded	Total
Maybe	1	5	2	1	9
No	2	1	12	1	16
Yes	0	1	2	2	5
Total	3	7	16	4	30

CHISQUARETESTS

Test	Value	DF	AS
Pearsonchisquare	13.151	6	.041
Likelehoodratio	12.879	6	0.45
Noofvalidcasess	30	-	-

FINDINGS:

1. **High Demand Segments:**

- Tailgate gas springs and bonnet gas springs are the most in-demand types for cars.
- Bus luggage door gas springs have significant demand in public and private bus services.

2. **High Demand Segments:**

- Tailgate gas springs and bonnet gas springs are the most in-demand types for cars.
- Bus luggage door gas springs have significant demand in public and private bus services.

3. **Vehicle Preference:**

- Gas springs are most frequently sold for SUVs like Mahindra XUV, Suzuki Swift, and Volkswagen Tiguan R.
- Mechanics report frequent replacements in Tata Nexon and Suzuki Swift.

SUGGESTIONS:

1. **For Manufacturers & Distributors:**

- Introduce mid-range gas spring products that balance price and quality to target semi-urban markets.
- Improve supply chain efficiency to reduce stock-out issues of popular brands.

2. **For Dealers:**

- Educate mechanics and customers on the long-term value of branded gas springs.

3. **For Mechanics:**

- Recommend gas springs based on fitment quality and longevity rather than just price.
- Encourage customers to opt for reliable brands by explaining performance and warranty benefits.

CONCLUSION:

The study concludes that the automotive gas spring market in Coimbatore has strong current demand and promising future potential, particularly in the SUV and bus segments. While branded products like Stabilus and Gabriel dominate the quality space, local brands continue to thrive due to affordability and accessibility.

Price sensitivity, fitment reliability, and product availability are key drivers of purchase decisions among dealers and mechanics. The market offers room for expansion, especially in adjustable and premium gas spring segments.

REFERENCES:

- Malhotra, N. K. (2019). *Marketing Research: An Applied Orientation* (7th ed.). Pearson Education, New Delhi.
- → Used for market potential analysis, research design, sampling, and data analysis.
- Kotler, P., Keller, K. L., Koshy, A., & Jha, M. (2017). *Marketing Management* (15th ed.). Pearson Education, India.
- Gosavi, S. (2025). *Automotive gas springs market report 2025* (Global edition). Market Research Report.
- Sharma, R. (2024). *Gas spring for vehicles market research report 2024*. Market Research Report.
- Dr. N. Amsaveni, A study on Effectiveness of Marketing and Promotional strategies followed by Zaron Industries, Arthshastra, Indian Journal of Economics and Research, 2277-7067, Volume 13, Issue 3 No 1, 13-18
- Ms. C. Ranganayaki, (2025). A Study on Marketing Strategies and Consumer Perceptions With Reference to Pizzahut, Coimbatore, International Journal of Management Research & Review (IJMRR), Pg no; 45 – 50.

Copyright & License:



© Authors retain the copyright of this article. This work is published under the Creative Commons Attribution 4.0 International License (CC BY 4.0), permitting unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.