

COMMERCIAL VEHICLE REPAIR SHOP

1. INTRODUCTION:

All types of motor commercial vehicles like 4 wheeler buses, LCVs and HCVs, jeeps, and off shore heavy duty vehicles require regular normal service and repairs for safety and durability of these vehicles.

2. PRODUCT & ITS APPLICATION:

Commercial vehicle are always under heavy duty operating conditions and therefore require more frequent servicing and repair needs of major and minor viz axle repair, leaf springs, bushings and engine repairs like valve repair, cylinder, injection system, etc. A specialized repair station can be established by experienced entrepreneurs or qualified persons, with low investment.

3. DESIRED QUALIFICATIONS FOR PROMOTER:

The promoter with experience heavy commercial vehicle maintenance will be having good scope to invest in such a project.

4. INDUSTRY OUTLOOK/TREND

India's passenger vehicles population of around 29 million during 2015 is expected to grow to more than 48 million vehicles by 2020. Also, domestic sales of commercial vehicles are expected to grow at a CAGR of 11.6% from 0.6 million in 2015 to more than 2 million by 2026.

The Indian auto industry is one of the largest in the world. The industry accounts for 7.1 per cent of the country's Gross Domestic Product (GDP). Moreover, the growing interest of the companies in exploring the rural markets. Also the new regime of GST is facilitating transport

of goods without any hindrance throughout the country will lead to growth of goods carrier to satellite cities and rural hubs that will further aided the growth of the sector.

The trend in goods and passenger transport industry to rely on better maintained and good riding quality for buses, while multiple variants of Long trailers and very HCV (heavy Commercial Vehicles) to LCV and mini and micro LCV to transport goods indicate the need for large no of commercial vehicles repair and service center demand.

5. MARKET POTENTIAL AND MARKETING ISSUES. IF ANY:

The overall Vehicle (PV) segment has 14 per cent market share. Production of passenger vehicles, commercial vehicles, three wheeler and two wheeler grew at 5.41 per cent in FY17 to 25,316,044 vehicles from 24,016,599 vehicles in FY16. The sales of passenger vehicles, commercial vehicles and two wheeler grew by 9.23 per cent, 4.16 per cent and 6.89 per cent respectively, during the period April-March 2017. With the increasing automobile demand, the country is also proportionately expected to witness a surge in sheet metal products used to manufacture these vehicles.

Considering the economic growth and increased trade due to GST introduction the frequency of goods transport directly to end customers shall increase and the no of commercial vehicles plying the road will increase.

A good repair station can also tie up with goods and heavy vehicle OEM to be an authorized service station. Also tie ups with fleet owners viz transport operators for regular inspection and servicing for preventive maintenance will be a better business model.

6. RAW MATERIAL REQUIREMENTS:

The service station shall require mostly consumables like lubes, grease, welding consumables and servicing requirements and spares as raw materials.

7. MANUFACTURING PROCESS:

The main activity of the repairs and maintenance servicing activity is need based. For preventive maintenance of commercial vehicles, the regular check points and diagnostic mechanism is used based on the total kilometers traveled. Accordingly the worn out parts are replaced prior to failure to ensure smooth running of vehicles.

Break down repairs require on road and in shop assistance to repair or replace the parts. Also major engine, transmission system and load bearing chassis parts are also carried out as per the customer needs. Many parts are machined, rebuilt by metal spraying/ welding and modified as per the standard practices.

8. MANPOWER REQUIREMENT:

The unit shall require highly skilled service persons. The unit can start from 4 employees initially and increase to 15 or more depending on business volume.

Sr. No.	Type of Employees	Monthly Salary	No of Employees				
			Year 1	Year 2	Year 3	Year 4	Year 5
1.	Skilled Operators	20000	1	2	3	3	4
2.	Semi-Skilled/ Helpers	8000	3	3	5	6	8
3.	Supervisor/ Manager	25000	0	1	1	1	1
4.	Accounts/ Marketing	15000	0	0	1	1	1
5.	Other Staff	5000	0	0	1	1	1
	TOTAL		4	6	11	12	15

9. IMPLEMENTATION SCHEDULE:

The unit can be implemented within 3 months from the serious initiation of project work.

The unit is based on selection of location, renting premises for the unit.

Sr. No.	Activities	Time Required in Months
1	Acquisition of Premises	-
2	Construction (if Applicable)	-
3	Procurement and Installation of Plant and Machinery	2
4	Arrangement of Finance	2
5	Manpower Recruitment and start up	1
	Total Time Required (Some Activities run concurrently)	3

10. COST OF PROJECT:

The unit will require total project cost of Rs 16.93 lakhs as shown below.

Sr. No.	Particulars	In Lakhs
1	Land	0.00
2	Building	3.00
3	Plant and Machinery	10.45
4	Fixtures and Electrical Installation	0.68
5	Other Assets/ Preliminary and Preoperative Expenses	0.25
6	Margin for working Capital	2.55
	TOTAL PROJECT COST	16.93

11. MEANS OF FINANCE:

The project will require promoter to invest about Rs. 6.14 lakhs and seek bank loans of Rs. 10.79 lakhs based on 70% loan on fixed assets.

Sr. No.	Particulars	In Lakhs
1	Promoters Contribution	6.14
2	Loan Finance	10.79
	TOTAL :	16.93

12. WORKING CAPITAL REQUIREMENTS:

Working capital requirements are calculated as below:

Sr. No.	Particulars	Gross Amt	Margin %	Margin Amt	Bank Finance
1	Inventories	0.69	40	0.28	0.42
2	receivables	1.66	50	0.83	0.83
3	Overheads	0.89	100	0.89	0.00
4	Creditors	1.38	40	0.55	0.83
	TOTAL	4.63		2.55	2.08

13. LIST OF MACHINERY REQUIRED:

The layout of unit suitable for different activities are planned to ensure smooth material and product flow. The servicing pit is a good way to offer repair services.

Sr No	Particulars	UOM	Quantity	Rate	Total Value
	Main Machines/ Equipment				
1	Truck Wheel Tyre Remover unit	Nos	2	60000	120000
2	Wheel / Rim Balancing machine		1	150000	150000
3	Heavy Duty Lathe 6' ft. bed	Nos	1	75000	75000
4	Elec. Arc Welding machine	Nos	1	80000	80000

5	Gas Welding machine		1	60000	60000
6	Metalizing lathe and gun	Nos	1	80000	80000
7	Milling Machine	Nos	1	200000	200000
8	Pillar drilling machine	Nos	1	25000	25000
9	Air Compressor	Nos	1	180000	180000
	subtotal :				970000
1	Tools and Ancillaries				
2	Bench and Belt Grinders	LS	1	15000	15000
3	Portable Tools	LS	1	50000	50000
4	Gauges and tools	LS	1	10000	10000
	subtotal :				75000
	Fixtures and Elect Installation				
	Storage racks	LS	1	5000	5000
	Other Furniture	LS	1	8000	8000
	Telephones/ Computer	LS	1	20000	20000
	Electrical Installation	LS	1	35000	35000
	subtotal :				68000
	Other Assets/ Preliminary and Preoperative Expenses	LS	1	25000	25000
	TOTAL PLANT MACHINERY COST				1138000

All the equipments and tooling are available from local manufacturers. The entrepreneur needs to ensure proper selection of equipments and tooling to have modern and flexible servicing. It may be worthwhile to look at reconditioned /used equipments and toolings. Some of the machinery and dies and toolings suppliers are listed here below:

1. Machineries and Spares
Ranjit Chawla (Director)201, Karmastambh, LBS Marg, Vikhroli West
Mumbai - 400083, Maharashtra, India
2. Pacific Engineering Corporation
A-297, MIDC-Mahape, Near Mahape Bus Depot,

Anthony Garage, Thane-Belapur Road, MahapeMidc,
Navi Mumbai-400710, Maharashtra, India

The above list of machine supplier is illustrative. There are many machinery, dies and tools suppliers and consultants at several industrial clusters all over India where you may find suppliers of services and machineries for a chosen product mix.

14. PROFITABILITY CALCULATIONS:

Sr. No.	Particulars	UOM	Year Wise estimates				
			Year 1	Year 2	Year 3	Year 4	Year 5
1.	Sales	Rs Lakhs	19.95	26.60	33.25	39.90	46.55
2.	Raw Materials & Other Direct Inputs	Rs Lakhs	8.31	11.08	13.85	16.62	19.39
3.	Gross Margin	Rs Lakhs	11.64	15.52	19.40	23.28	27.16
4.	Overheads Except Interest	Rs Lakhs	9.12	9.12	9.12	9.12	9.12
5.	Interest	Rs Lakhs	1.51	1.51	1.51	1.51	1.51
6.	Depreciation	Rs Lakhs	1.73	1.73	1.73	1.73	1.73
7.	Net Profit Before Tax	Rs Lakhs	-0.72	3.16	7.04	10.92	14.80

The basis of profitability calculation:

Unit will have capacity of servicing 600 nos Mini/ micro and other LCVs/ Buses and large trailers to Heavy cargo vehicles and 500 nos of two vehicles / small vehicles work including modification/major repair work for vehicles like vans Jeeps/ SUV. The repairing involves replacing parts at cost, however there is a margin of approx 10% or more on these components for servicing unit. The average billing of service and repair varies from Rs.1500 to Rs.10000 for smaller vehicle and that for larger LCVs are ranging from Rs 300 to Rs. 20000 per vehicle. For HCVs viz Buses and Trucks, the cost of repair and servicing may range up to Rs. 30000 per vehicle.

The material requirements are almost nil as parts replaced and consumables like fasteners, clips, oil and grease, for which the cost is always charged. The repair also generates old worn parts wastage/ scrap to be sold at @ Rs 20 ~ 80 per Kg depending on type. The income of same is added. Consumables costs also considered based on prevailing rate.

Energy Costs are considered at Rs 7 per Kwh. The depreciation of plant is taken at 10 % and Interest costs are taken at 14 -15 % depending on type of industry.

15. BREAK EVEN ANALYSIS

The project is can reach break-even capacity at 31.85 % of the installed capacity as depicted here below:

Sr. No.	Particulars	UOM	Value
1	Sales at Full Capacity	Rs Lakhs	66.50
2	Variable Costs	Rs Lakhs	27.70
3	Fixed Cost incl. Interest	Rs Lakhs	12.36
4	Break Even Capacity	% of Inst Capacity	31.85

16. STATUTORY/ GOVERNMENT APPROVALS

The unit may obtain industry unit registration from District Industry center. Shops in city areas shall need to get shop and establishment registration from local municipality etc. no other procedures are involved. Before starting the unit unit will also need GST registration for procurement of spares etc materials as also for sale of goods and services. As such there is no pollution control registration requirements, however the unit will have to ensure safe environment and Solid waste disposal shall have to meet the required norms.

17. BACKWARD AND FORWARD INTEGRATION

The machines and equipment offer scope for diversification in to servicing other consumer and industries. As such there is not much scope for organic backward or forward integration. A provision for building a servicing pit of 10 mtrs length with water, air etc. utilities from the pit

will go a long way in offering easy work environment, better services and boosting business. Its cost is included in above project.

The vehicle service and repair business needs building up reputation, ensuring reliability and quality of services rendered. Also personal rapport of key persons can generate good business volumes from corporate fleet owners and with vehicle producers offering authorized service station franchise. The location with good catchment area ensures good market potential to new business units.

18. TRAINING CENTERS/COURSES

There are no specific training centers for production technology. Most of the training is given by Auto Vehicle manufacturers upon getting authorized service station or through apprenticeship with experienced vehicle repair shops.

Udyamimitra portal (link: www.udyamimitra.in) can also be accessed for hand-holding services viz. application filling / project report preparation, EDP, financial Training, Skill Development, mentoring etc.

Entrepreneurship program helps to run business successfully is also available from Institutes like Entrepreneurship Development Institute of India (EDII) and its affiliates all over India.

Disclaimer:

Only few machine manufacturers are mentioned in the profile, although many machine manufacturers are available in the market. The addresses given for machinery manufacturers have been taken from reliable sources, to the best of knowledge and contacts. However, no responsibility is admitted, in case any inadvertent error or incorrectness is noticed therein. Further the same have been given by way of information only and do not carry any recommendation.