

## Regarding Vehicle servicing and repairing

### Manual Workflow in center's POV when a customer brings a vehicle for a typical service

1. Admitting the vehicle
  - done by the security section
  - check appointment details
  - check the physical condition (issues in the painting/damages etc.)
  - customer fills in details about issues with the vehicle that he experiences
  - a report based on these details will be sent to an engineer
2. Analyzing the vehicle
  - The engineer checks the report and assigns a foreman
  - Then the foreman takes the vehicle to a test drive
  - in the test drive, foreman checks breaks, suspension, and other technical aspects.
  - He generates a fault report
  - Technicians do a full inspection of the vehicle and provides a status report
3. Get customer approval
  - After analyzing status and fault report while also looking into previous history to determine what needs to be done in this servicing, foreman calculates a cost estimation
  - asks the customer if he/she wants to proceed with extra expenses for new parts
4. Servicing process
  - Technicians service the vehicle
5. After service checkup
  - foreman takes the vehicle for a test drive again and check the status of previously identified faults
  - if there is an issue still, consult with engineer
  - else direct vehicle to the body wash
6. Body wash
  - interior cleaning and body wash
7. Billing
  - generate a bill using foreman's final report
8. Security Clearance
  - Checking the bill
  - checks the physical condition to make sure there aren't any faults/wrong doings from the service center's side.

### Manual workflow of a vehicle repair

1. Creating a job card
  - asks the customer about issues he/she is facing and checks the previous repair and service history
  - creates a job card based on these info
2. Analyzing the vehicle

- The engineer checks the report assign a foreman
  - Then the foreman takes the vehicle to a test drive
  - He generates a fault report
  - Technicians do a full inspection of the vehicle and provides a status report
3. Get customer approval
    - After analyzing status and fault report, foreman calculates a cost estimation for the repair
    - asks the customer if he/she wants to proceed with extra expenses for new parts (in this step, foreman checks if the required parts are available in the center, otherwise inquire the customer if it's okay to get the part from elsewhere (another branch, dealer etc))
  4. Repairing
    - technician do the repairing part
    - update the progress of the vehicle in the system
  5. After repair checkup
    - foreman takes the vehicle for a test drive again and check the status of previously identified faults
  6. Billing
    - generate an invoice using foreman's final report
  7. Security Clearance
    - Checking the bill
    - checks the physical condition to make sure there aren't any faults/wrong doings from the service center's side.

## **Regarding auto parts selling (Spare parts, batteries, engine oil& lubricants, electronics,stickers & modifications etc.)**

### **How spare parts stock management & selling works**

- Usually, only regular customers can reserve spare parts beforehand
- So regular customers can reserve some spare part to purchase it later
- Spare parts are identified by not only their part number but also a code based on the vehicle brand.
- Usually sellers analyze their weekly selling performance to get a idea on what items are demanding at the moment
- Some sellers even deliver spare parts to regular customers like service centers/technicians
- they keep all purchase records(customer details and what they've bought)
- for the same spare part, there are multiple manufacturer brands (Genuine, Japanese, Chinese, Thai etc.).They vary based on longevity and price.

### **How other products selling and stock management works**

- More people order them online compared to spare parts
- stocks are managed through a system which also allows to analyze sale performance,same as spare parts
- Also keep purchase details
- for products that offer warranty, also keep warranty details

Based on these workflows, we've realized that a large-scale service centre which also sells spare parts and accessories should have following main roles to function well.

- Security Staff
- Foreman
- Technician
- Stock manager
- Customer care staff
- Billing staff
- Administrator
- Customer