Repairs – Service Writers

Repair Entity

* VIN (or vehicle surrogate ID)
* Odometer Reading
* Start Date
* Customer ID
* Labor Charger
* Parts List
* Completion Date

Part Entity

* Quantity
* Vendor
* Part Number
* Price

Other entities that related to repairs

* Vehicle
* Customer

Repair – Part: one to Many (Mandatory for part. a weak entity?)

Repair – Vehicle: Many to one

Repair – Customer: Many to one

Business Rules:

Only one repair can be open (null completion date) at a time

Any updates on labor charges cannot be less than their previous values

Input validation for price, quantity, etc.

Once a repair is created for a vehicle and customer, but is not closed, only labor charges parts can be changed or the repair can be closed.