Terms of Reference for the Position of Mechanical Engineer

1. **Position Title : Mechanical Engineer**
2. **Position Level : 7**
3. **Employment Status : Regular**

Purpose

Mechanical Engineer will be responsible for managing and organizing business activities with customers. Role of the Mechanical Engineer typically is to ensure smooth and efficient management of the Service Centre. A Mechanical Engineer in this field must have the ability to communicate, negotiate and coordinate events with business partners including the clients. He/She shall report to the General Manager of the Business Division.

Duties and Responsibilities

The following are the duties and responsibilities of the Mechanical Engineer. However, the Mechanical Engineer may be required to execute any additional task delegated by the Supervisor in the interest of the Company. The Services of the Mechanical Engineer can be transferred to other area within the Company without affecting current remuneration.

Summary of the Key functions:

A Mechanical Engineer in the Service Centre will execute the following duties:

- Develop world class performance for the assigned attributes.
- Leading CAE, subsystem and /or full vehicle development programs including the data acquisition, pottest analysis and leading attribution report out.
- Engine Overhauling.

Vehicle Dynamics Engineering System:

- Working knowledge of suspension and steering systems.
- Strong competency in various VD analysis tools.
- Experience in actuators such as steering, braking and power system.
- Experience with CAN (CANBUS)
- Experience with various data acquisition techniques.

NVH Engineering System:

- Noise, vibration and harshness (NVH) testing analysis experience.
- Solid NVH troubleshooting skill for issues resolution based on experience.
- Subjective evaluation skills for power train sounds.

- Experience with data acquisition using tools such as LMS,B&K, Head and others.
- Experience with Matlab, FEA and other commercial NVH software.
- Knowledge and understanding of Upper and Upperbody construction.
- Aerocaustic development and CFD experience.
- Noise path & Modal Analysis.
- Experience with sound package materials.

DAT Engineering System:

- Experience with automation and controls.
- Experience with human-machine interactions.
- Experience with sensors such as Radar, Lidar, Camera and Ultrasonic.
- Experience with CAN (CANBUS)
- Experience with various data acquisition techniques.

Required Competencies, Knowledge, Skills and Abilities

1) **Making Decisions and Solving Problems:** Analyzing information and evaluating results to choose the best solution and solve problems.
2) **Interacting with Computers:** Using computers and computer systems (including hardware and software) to program, write software, set up functions, and enter data or process information. Compiling, coding, categorizing, calculating, tabulating, auditing or verifying information or data.
3) **Communicating with Supervisors, Peers or Subordinates:** Providing information to supervisor, co-workers and subordinates by telephone, in written form, e-mail or data.
4) **Evaluating Information to determine compliance with standards:** Using relevant information and individual judgment to determine whether events or processes comply with the laws, regulations or standards.
5) **Identifying objects, actions and events:** Identifying information by categorizing, estimating, recognizing differences or similarities and detecting changes in circumstances or events.
6) **Communicating with persons outside the Organization:** Communicating with people outside the Organization, representing the Organization to customers, the public government and other external sources. The information can be exchanged in person, in writing or by telephone or e-mail.
7) **Analyzing data and information:** Identifying the underlying principles, reasons or facts of information by breaking down the information or data into separate parts. Keeping up-to-date technically and applying new knowledge to your job.
8) **Documenting/Recording Information:** Entering, transcribing, recording, storing or maintaining information in written or electronic/magnetic form. Monitoring and reviewing information from materials, events or the environment to detect or access problems.
9) **Resolving, conflicts and negotiating with others:** Handling complaints, settling disputes and resolving grievances and conflicts or otherwise negotiating with others.

10) **Critical thinking:** Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems. Considering the relative costs and benefits of potential actions to choose the most appropriate one.
11) **Active Listening:** Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate and not interrupting at inappropriate times.
12) **Coordination:** Adjusting actions in relation to others actions. Understanding the implications of new information for both current and future problem-solving and decision making. Managing one's own time and the time of others. Understanding written sentences and paragraphs in work related documents.
13) **Monitoring:** Monitoring/Assessing performance of yourself, other individuals or Organizations to make improvements or take corrective actions.
14) **System Analysis:** Determining how a system should work and how changes in conditions, operations and the environment will affect outcomes. Installing equipments, machines, writing or programs to meet the specifications.