

Z1 Off-Road Mechanical Engineer

The Z1 Off-Road Mechanical Engineer will be responsible for the design, manufacturing documentation, and validation of Z1 branded product. They will work closely with other Z1 engineers, supply chain, quality control, manufacturing, marketing, and our project coordinator to successfully bring to market world class mechanical components and kits.

Enthusiasm for CAD modeling, 3D printing, fabrication, and the off-road aftermarket is a strict requirement for this role. This position will sit alongside industry experts who thrive on new product design and automotive modification.

Responsibilities:

- Perform feasibility studies on new product ideas
- Work with our project coordinator, supply chain, and Director of Product Development to establish a timeline for new products from the design phase through commercialization.
- Use in-house 3D scanners to reverse engineer the packaging envelope for new products and set up a CAD model environment using Geomagic and Solidworks
- Create component and assembly CAD models using Solidworks
- Use in-house 3D printers to print components for test fitment and if applicable on-vehicle use
- Create complete Bills of Materials for products and sub-assemblies with great attention to detail
- Present design reviews to engineering staff and others to seek design approval
- Use Solidworks to create manufacturing drawings for components and assemblies
- Responsible for creating sample validation plans and validating samples once they arrive
- Work with Quality Control to establish quality standard for new products

Required Qualifications:

- A proven passion for off-roading and/or overlanding
- BS in Mechanical Engineering or equivalent credentials/experience
- Well versed in Solidworks CAD modeling and drawing creation
- Proven understanding of GD&T
- Skilled in PC usage and associated software including Microsoft Office
- Ability to work in a fast-paced, results oriented, environment
- Passion for CAD modeling and product design
- 3D printing experience
- Ability to "turn-a-wrench" when needed



Desired Qualifications:

- 3D Scanning/metrology experience
- Experience with welding and various forms of metal fabrication
- Experience with manual and CNC machining
- Basic understanding of automotive electronics

Physical Demands:

- Must be able to sit and/or stand for long periods of time
- Must be able to lift 40lbs