

Summary

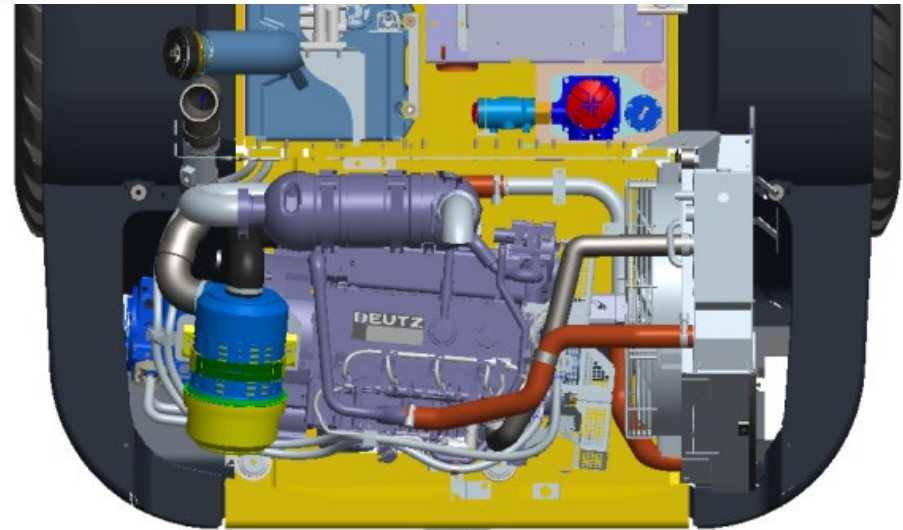
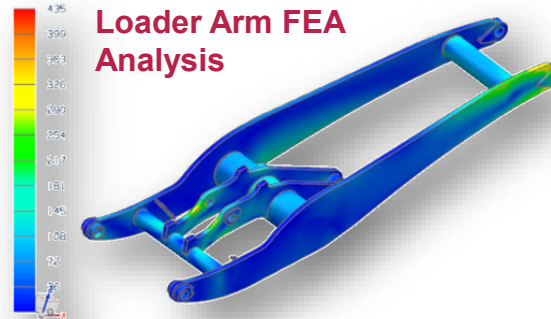
Project Name: Tier 4 Interim Implementation for TL70/TL80/TL100/TL120/TL160 Wheel Loaders

Scope: Engine Emission Upgrade from Perkins Tier 3 to Tier 4i for Deutz Engines

Software: Pro-Engineer

This Project involved designing of all Sub Groups listed below to accommodate Tier 4i Implementation:

- Integrate Tier-4 Deutz engine on the machines.
- Engine packaging peripherals like EGR, DPF, Air filter, and oil cooler.
- Interference compatibility check of new engine with the machine parts.
- Modification of structural parts, oil & diesel tanks, engine hood etc. as necessitated thru the interference study.
- Rotation of engine by 180° along the engine axis for serviceability.
- Exhaust pipe routing in small package.
- Fuel tank & hydraulic tank redesign



Engine Assembly

Complete Power pack layout

Summary

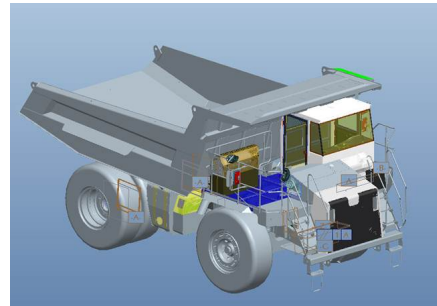
Project Name: Tier 4 Interim Implementation for TA300, TA400 & TR60 - Dumpers

Scope: Engine Emission Upgrade from Tier 3 to Tier 4 Interim and standardize for TA300, TA400 & TR60 Machines.

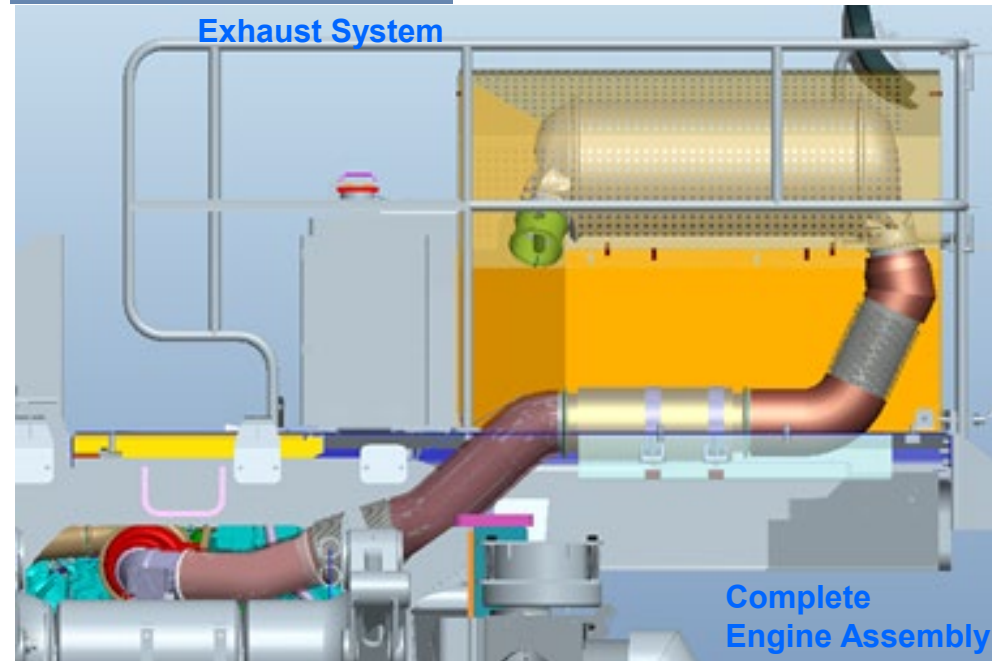
Software: Pro Engineer

This Project involved designing of all Sub Groups listed below to accommodate Tier 4i Implementation:

- Redesign existing systems to accommodate new engine.
- Install EAT system as per new SCR requirements.
- Common part for TA300 & TA400
- Redesigned rear frame weldment, fender platform , A-frame for the new requirement.
- Installed EAT system as per the latest SCR requirements.
- 100% 3D hose routings & installations completed for the new hydraulic system.
- Resolved all engineering issues found during prototype build.
- Released all drawings & TMS BOM for production



Chassis and Decking assembly



Exhaust System

Complete Engine Assembly