## ToT proposal – Uprated 1000 hp engine

Weight of T-72 tank has been increased from 41t to 44t with addition of various value added modules. To improve the mobility characteristics, CVRDE uprated power output of existing engine of T-72 tank produced by Ordnance Factory Board from 780 hp to 1000 hp.

Power was uprated by retaining core engine components and replacing only peripheral systems of engine like intake system, exhaust system, cooling & lubrication system. The engine had successfully undergone 400 hrs endurance testing.

The uprated engine has been integrated within the existing vehicle compartment and the compartment requires minor modifications. To cater for the requirement of 1000 hp engine, higher capacity efficient air filtration and compact cooling system has been integrated within the available vehicle compartment.

The uprated engine was extensively evaluated at Avadi and various desert locations. The engine had completed User trials at desert conditions in summer and medium fording evaluation. All the upgradation modules like Turbocharger, Charge air cooler, Water pump, Exhaust manifold, oil filter, air filtration system and cooling system are indigenously available. Also, this upgradation is a proven, easy, time saving, cost effective and totally indigenous solution.

Army is planning to upgrade the existing fleet of T-72 Tanks with 1000 hp engine and its associated system through `MAKE' category. Hence ToT for upgradation of T-72 Tanks with Uprated 1000 hp engine and its associated systems is available to Indian industries.



Uprated 1000 hp Engine



Uprated 1000 hp Engine integrated in T-72 Tank