AT12-150 : Power & Performance I: Engine Build

Students gain knowledge of basic engine rebuilding procedures when given an exacting set of specifications (blueprinting). Small block domestic performance engines are disassembled, measured and reassembled with emphasis on high performance engine building techniques and practices. Students learn basic cylinder head design and the operation of a flow bench in improving cylinder head flow characteristics. Computer-aided component selection and blueprinting procedures are stressed along with proper block preparation and cylinder head assembly. Cylinder head designs, valve train geometry, roller rockers and lifters, and connecting rod angularity also are explained during this course. Camshaft theory and operation with respect to lift, duration, lobe separation and valve opening/closing speeds are discussed. Block decking, compression ratio calculations and varying bore/stroke combinations are covered. Students become aware of all aspects of building an engine to order and how the proper selection of components that complement each other will lead to satisfactory results.

Lab 39.84
Lec 46.16
Ext 0.00
Sem 4.00
TWC Sem 4.00
Total 86.00

Catalog
UTI Tech II
Prerequisites
AD12-101: Introduction to Engines
Equipment
Chevrolet 350 small block engines, flow bench and computers
Campus
Avondale, AZ
Rancho Cucamonga, CA
Sacramento, CA
Austin, TX
Bloomfield, NJ
Dallas, TX
Long Beach, CA
Miramar, FL
Orlando, FL