



Dyno Tuned Crate Engine, What Does That Mean

We take your completed, Sehr engineered, engine and prep the assembly for the Dyno chassis. We begin by installing the proper flywheel or flex plate, whether internally or externally balanced, along with the correct bell housing. We then install the engine assembly on our Stuska / DTS Dyno, level and secure. We install exhaust headers, heat probes for each cylinder, intake manifold vacuum gauge, cooling components and electric drive for the water pump.

We fill and install the oil filter, fitted with a pre-filter screen and then fill the crankcase to the proper level with break in oil and cam lube additive as needed. The engine oil system is then hand primed and checked for pressure to confirm that all components are lubricated and functioning properly. The distributor is installed and degreed to 30° before top dead center for proper start up. All spark plugs are examined to confirm they are the correct reach and heat range, then gapped to proper setting before installation. 8mm spark plug wires are fabricated in house for a custom fit with the proper routing, tested and installed. We check and confirm all carb jetting and adjustments for the engine combination. Set up the Dyno throttle to establish full open and closed throttle position and the choke is opened for Dyno operation.

Next we set up the fuel inlet system and confirm the fuel type needed, fill the fuel cell, hook up the fuel pump and turn it on to confirm fuel flow, check for leaks and set operating pressure. We then set and check the float settings and fuel levels. Go through and confirm pre-fire checklist, connect ignition to the distributor, confirm power, fill cooling system using air bleed method. Run final pre-fire checklist.

Initial fire your engine for cam and ring break-in. The engine is brought up to 2500rpm, oil pressure and all exhaust gas and engine temps are monitored with someone at the control board at all times; initial ignition timing is set, oil pressure, fuel consumption, coolant temp and exhaust gas temperatures are continually monitored. Look for and confirm no oil leaks. After approximately 10 minutes running time we apply 10% load on engine. After 25 minutes we shut down and cool the engine.

We pull and read the spark plugs, to confirm proper burn, remove the valve covers, and check rocker arms and valve lash. If needed we will do a leak down test, look inside all cylinders with our bore scope and confirm ring seating and proper burn conditions. Re-install spark plugs and valve covers and get ready for initial Dyno pull.

Your engine is fired for initial Dyno pull. We bring it to operating temp, confirm ignition timing, load the engine and pull at full throttle through desired rpm range while monitoring all engine parameters. Throttle down and shut down engine. Retrieve and study all data. Pull and read spark plugs. The pre-filter screen is checked for debris and the filter is re-installed.

If proper tune was not achieved on the first 'full load pull', adjustments to correct the engine tune will be made and another pull done.

After correct tune is met, your engine is cooled down again, the choke is hooked up and cold start confirmed, the idle speed is set and throttle response confirmed. Print final Dynamometer data including temperature, humidity, barometric pressure, horsepower and torque output for your records.

Your engine is disconnected from the Dyno, all openings are sealed, it's stretch wrapped and placed in an engine cradle ready for pick up or for crating if it is to be shipped by common carrier.

Sehr Performance Machine

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