



**Compression Pressures For
1970-99 Kubota Diesel Engines**

The AERA Technical Committee offers the following information regarding cranking compression specifications for Kubota diesel engines. This information should be referenced anytime the engine is being considered for rebuild or evaluated. To obtain an accurate value of cranking compression, the engine should be operated until normal operating temperature is obtained. If an engine will not start, the cold cranking compression value can be used but it will be 3-10% lower than a hot reading.

Kubota provides seven different adapters to help facilitate the cranking compression test and suggests the following precautions and instructions before testing.

1. Remove the air cleaner and muffler to allow for free flow while spinning engine over.
2. Remove the fuel nozzles from all cylinders and install compression tester of at least 600 PSI.
3. Pull the fuel stop lever, or override the stop solenoid. Turn the engine over with the starter until the maximum pressure is obtained. Crankshaft rotation must be at least 250 RPM.
4. If the pressure is less than the allowable limit, rotate each piston to top dead center (TDC) and inject 1 ml of clean 10W engine oil in each cylinder and retest.
5. If the readings do not improve, suspect the engine valves of leakage, a bent rod or worn pistons and rings.
6. Compression variance between cylinders should be less than 10%.
7. If compression readings are close to the allowable limit specification, the engine may run but it will never develop full horsepower. As much as 25% loss of power should be expected.

<u>Engine Model(s)</u>	<u>Adapter</u>	<u>Standard Value</u>	<u>Allowable Limit Before Rebuild</u>
D600, D640, D662, Z400, Z430 Z482, D722, D905, D1005, V800 V1105, V1205, V1305, V1505	E	412- 469 PSI	327 PSI
Z500, Z600, ZH600, Z751, Z871, D650 D750, D850, D950, D1101, D1102 D1301, D1302, D1402, V1100, V1101 V1200, V1501, V1502, V1702, V1902 V2202, S2200, S2600, S2800	B	412- 469 PSI	327 PSI
ZL600, Z1100	A	412- 469 PSI	327 PSI
A1300	D	412- 469 PSI	327 PSI

D1302DI, D1402DI, V1702DI, V1902DI V2302DI, F2402DI, F260DI, S2802DI	F	412- 469 PSI	327 PSI
D1462DI, D1902DI, F2503DI F2803DI, V2203DI	G or I	412- 469 PSI	327 PSI
D3000, D3200, D3502, V4300 V4302, V4702	C	412- 469 PSI	327 PSI
D1503L-A, D1703A V1903A, F2803	E	512-540 PSI	360 PSI
AC60, OC60, OC95	B	455-469 PSI	360PSI

The AERA Technical Committee

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