



Connecting Rod Caution on 2003-2009 Isuzu 5.2 & 7.8L 4HK1 & 6HK1 Diesel Engines

The AERA Technical Committee offers the following information regarding a connecting rod caution for 2003-2009 5.2 & 7.8L 4HK1 & 6HK1 diesel engines. This caution should be referenced anytime these connecting rods are being remanufactured.

These connecting rods use a full floating piston pin design which allows for a serviceable bushing on the small end of the rod. At the factory these bushings are align-bored after installation to provide accurate control of the distance between the big and small end bore centers (C-C). Doing so, controls the resulting piston protrusion after engine assembly.

It has been reported that replacement bushings from Isuzu have significant bearing material to be removed to provide proper pin fit. It is important to note that fitting the bushing by honing is not recommended as shops have reported variations in rod beam lengths exist. As much as .030" (.750 mm) has been reported which would affect the rod C-C distance short or long if the small end is hone fit.

Previously published service information has not provided the rod C-C distance for these rods, but now, it has been determined to be 7.7953-7.7960" (198.000-198.018 MM).



Vehicle Type Industrial **Fuel Type** Diesel

Make ISUZU **Model** NPR **Year** 2005-2018 **VIN** **Liter** 5.2 **CID** 317 **Engine Code** 4HK1 **Cyl** L 4 **VLV/CYL** 4

Bore/Stroke 4.5284-4.5295" (115.021-115.050 MM) 4.9213" (125.000 MM) **Compression Ratio:** Ratio: 18.5:1 - Cranking 468 psi @ 200 rpm *
Firing Order 1-3-4-2

Comments SOHC DIESEL, 4 VALVES PER CYL, ALSO 4HK1-TC **Intfr Unknown**

Description	Specifications	
BigEnd Housing Bore	3.0699-3.0709" (77.974-78.000 MM)	<input type="checkbox"/>
Beam Length		<input type="checkbox"/>
BigEnd Width		<input type="checkbox"/>
BigEnd Side Clearance		<input type="checkbox"/>
Connecting Rod Torque	29 FT/LBS + 60° + 30°	<input type="checkbox"/>
Bolt Diameter		<input type="checkbox"/>
Small End Bore For Bushing		<input type="checkbox"/>
Small End Bore Finished ID	1.5753-1.5757" (40.012-40.022 MM)	<input type="checkbox"/>
Small End Oil Clearance	.0005-.0011" (.012-.027 MM)	<input type="checkbox"/>
Center To Center Distance	7.7953-7.7960" (198.000-198.0184 MM)	<input type="checkbox"/>
Twist/Bend	.002" @ 3.9400"	<input type="checkbox"/>
Comments	PISTON PIN DIAMETER 1.5746" (39.995 MM)	<input type="checkbox"/>

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