# **INTERSTATE-McBEE**



## **Technical Parts Gram #60: Measuring Cylinder Liner Projection in C15 Engines**



-	Needed Components					
ltem	Part Number	Description	1 Cyl QTY	6 Cyl QTY		
_ 1 _	7H3598	Bolt	6	26		
2	8F1484	Washer	6	26		
3	7K1977	Washer	6	26		

- The following procedure does not require the use of an "H" bar to hold the liners while the liner projection measurements are taken.
- The 7K1977 washer is crafted from a cotton fabric infused with resin, providing a durable and non-abrasive solution for protecting the cylinder block's sealing surface. These washers are disposable, so it is recommended to order extra to ensure a sufficient supply.
- 1. Install the new spacer plate gasket and a clean spacer plate.
- 2. Install the washers. Install all bolts or the six bolts around the liner. Torque for bolts: 95Nm (70 lb ft)
- 3. Use the components listed above to measure the liner projection at A, B, C, and D.
- 4. Record measurements for each cylinder.
- 5. Add the four readings for each cylinder, divide the sum by four to find the average.

Specifications					
Liner Projection	0.025 to 0.152mm (0.0010 to 0.0060in)				
Max. Variation in Each Liner	0.051mm (0.0020in)				
Max. Variation between Adjacent Liners	0.051mm (0.0020in)				
Max. Variation between All Liners	0.102mm (0.0040in)				



#### **Useful Measurement Tips for Accurate Results**

- Reposition the liner within the bore if projection changes during rotation. If the liner is still not within specs, try a different bore. Inspect the liner block top face for issues.
- Do not exceed 0.152mm (0.006in) as excessive liner projection will contribute to flange cracking.

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#### WORLD HEADQUARTERS 7440 Oak Leaf Rd. Oakwood Village, OH 44146 PH: 216-881-0015 Fax: 216-881-0805

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