Instructions for use of PT-5010

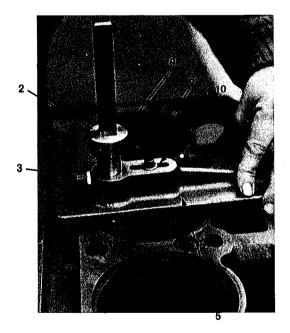
CONCENTRICITY GAUGE

READ CAREFULLY BEFORE USING

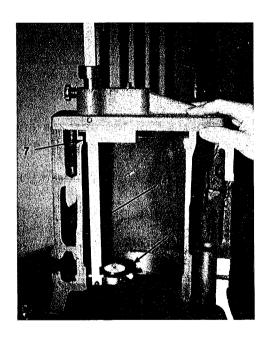
A very important inspection check when rebuilding a cylinder block or troubleshooting is the alignment (concentricity) of the cylinder liner upper counterbore to the lower (packing ring) bore.

Misalignment beyond tolerances listed in Engine Shop Manuals can be detrimental to the life of liners, packing rings, and pistons.

The "PT-5010" Concentricity Gauge, is a very compact tool and simple to use on all diesel engines. It is recommended that the concentricity be check anytime reworking of the upper counterbore ledge or resleeving of upper or the cylinder liner lower bore is performed.



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ET. #	PART #	PART DESCRIPTION	AMT.	
1	PT-5010-001	Dial Indicator	1	
2	PT-5010-004	Shaft Bushing	1	
3	PT-5010-005	Adjusting Knob	1	
4	PT-5010-012	Chromed Shaft	1	
5	PT-5010-013	Top Parallel Plate	1	
6	PT-5010-015	C'Bore Contact Plate	1	
7	PT-5010-016	*Steel Box	1	
8	PT-10090	Soc. Hd. Cap Screw	1	
9	PT-10108	Soc. Set Screw	1	
10	PT-12005	Washer	1	*NOT SHOWN







GENERAL INSTRUCTIONS

- 1. Thoroughly clean and remove all burrs and scale from the cylinder block top deck and counterbore surfaces to be checked.
- 2. To set tool to desired depth, measure the distance from the top of the block to the center of the lower bore. Next, loosen screw (9) and measure from bottom of top parallel plate (5) to dial indicator point (1); tighten screw (9).
- 3. Set dial indicator (1) to "0" reading before installing tool in the block.
- 4. Back-off on adjusting knob (3).
- 5. Adjust contact plate (6) as required to suit the bore of the block being checked by loosening screw and pushing contact plate forward all the way. For all Cummins engine blocks install the contact plate so that the pins are at the closest position to the bottom of the parallel plate (5); on all Caterpillar, GMC, and International blocks the contact plate must be turned over.
- 6. Place tool on the block and move forward until dial inidcator point makes contact; tighten screw (8).
- 7. Pushing contact plate (6) against counterbore area turn adjusting knob (3) to the right until the dial indicator makes one complete revolution to a "0" reading. Release and reposition tool the same way to double check dial indicator reading. Zero again, if required.
- 8. Rotate tool 180 degrees and apply firm hand pressure to insure contact plate contacts the counterbore inside diameter.
- 9. Observe indicator reading. Repeat procedure cross-wise of block.
- 10. The reading observed 180 degrees from the zero "0" reading is double the actual shift of the bore. (For example: if the indicator reads 0.002" the actual shift of the bore from centerline would be 0.001").



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