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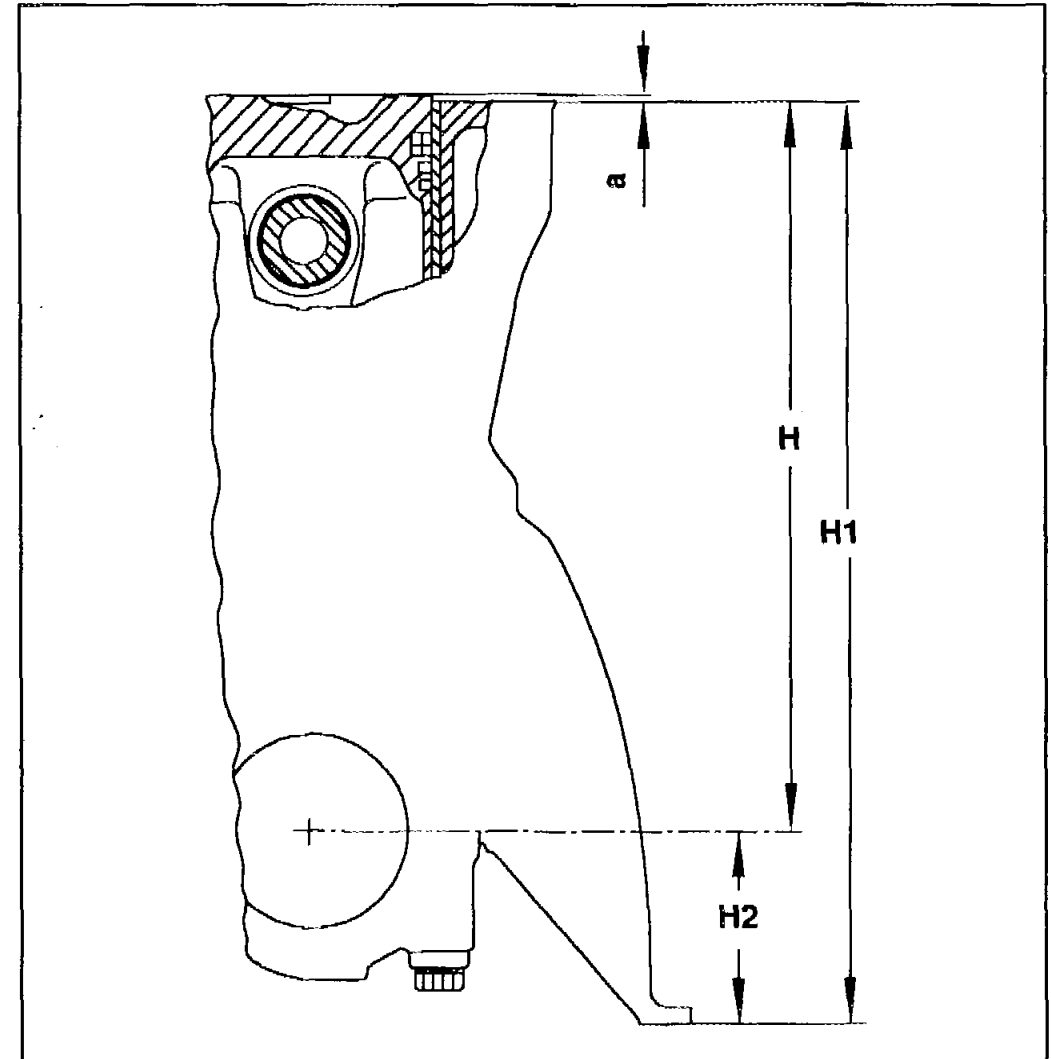
AR01.40-P-9133B






Machining crankcase contact surface

19.9.96

ENGINE 604, 605, 606 /**Crankcase**

- a* Piston projection
H Height of crankcase from center of basic bore
H1 Height of crankcase
H2 Height up to center of basic bearing bore



	Machining		
	Only machine crankcase contact surface if cylinder liners have been inserted, porous or damaged points exist or an impermissible difference of the flatness in the longitudinal direction is measured. The stock removal at the cylinder head and at the crankcase together must not be more than 0.5 mm.		
1	Remove pistons	 Installing: ↓ measure piston projection  After machining the contact surface of the crankcase, install a repair size cylinder head gasket (1.85 mm thick, unpresse, for engine 604 soft gasket, for engine 605, 606 gasket with metal layer)	AR03.10-P-7021B AR03.10-P-7041-01A H15
2	Inspect contact surface of crankcase for evenness in longitudinal direction		BE01.40-P-1005-02B WH58.30-Z-1002-12A
3	Machine contact surface of crankcase together with the timing case cover	 Pay attention to minimum dimensions of crankcase in respect of stock removal	BE01.40-P-1002-02B BE01.40-P-1005-02B

4	Chamfer cylinder bores		AR01.40-P-9201-01B BE01.40-P-1006-02B	E16
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Test data of crankcase

Number	Designation	Engine 604.910/912		
BE01.40-P-1002-02B	Height of crankcase from center of basic bearing bore (H)	When new	mm	234.97–235.03
		After machining	mm	≥ 234.60
		Fig. see		AR01.40-P-9133-02A
BE01.40-P-1005-02B	Crankcase	Peak-to-valley height (R_z) upper contact surface	mm	0.012
		Waviness (W_t) upper contact surface	mm	0.009–0.012
		Unevenness of contact surface in longitudinal direction	mm	0.03
		Unevenness of contact surface in transverse direction	mm	0.03
		Difference of parallelism of top contact surface to bottom in longitudinal direction	mm	0.05
BE01.40-P-1006-02B	Chamfer of cylinder bore at contact surface of crankcase		mm	0.2-1×75°



Test data of crankcase

Number	Designation		Engine 604.915/917 605.91/96 606.91/96
BE01.40-P-1002-02B	Height of crankcase from center of basic bearing bore (H)	When new	mm 234.97–235.03
		After machining	mm ≥ 234.60
		Fig. see	AR01.40-P-9133-02A
BE01.40-P-1005-02B	Crankcase	Peak-to-valley height (R_z) upper contact surface	mm 0.012
		Waviness (W_t) upper contact surface	mm 0.009–0.012
		Unevenness of contact surface in longitudinal direction	mm 0.03
		Unevenness of contact surface in transverse direction	mm 0.03
		Difference of parallelism of top contact surface to bottom in longitudinal direction	mm 0.05
BE01.40-P-1006-02B	Chamfer of cylinder bore at contact surface of crankcase	mm	$0.2-1 \times 75^\circ$

Commercially available tools (see Workshop Equipment Manual)

Number	Designation	Make (e.g.)	Order number
WH58.30-Z-1002-12A	Knife-edge straightedge, about 500 mm long		