Coordination piston — cylinder

Version [1])	Group no.	Piston dia.	Cylinder dia.
Standard	0	90.845 - 90.855	90.898 - 90.908
	1	above 90.855 - 90.865	above 90.908 - 90.918
	2	above 90.865 - 90.875	above 90.918 - 90.928

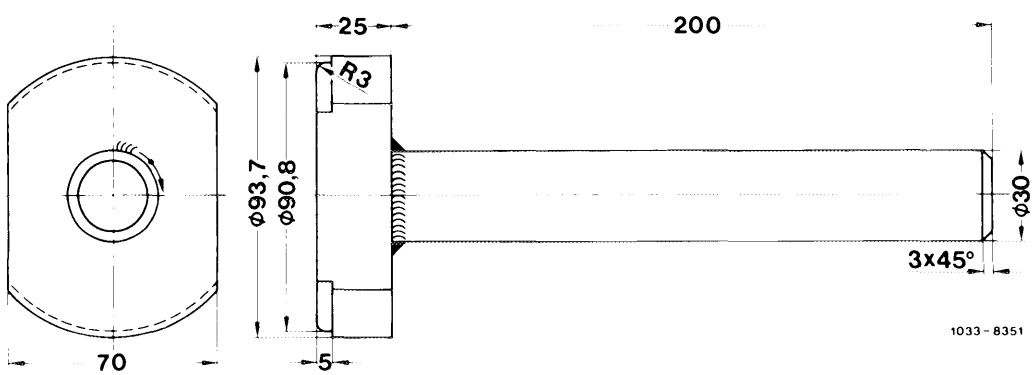
Cylinder crankcase

Basic bore in cylinder crankcase for cylinder liner	94.000 / 94.035
Permissible out-of-true of basic bore in cylinder crankcase	0.1
Roughness of cylinder crankcase parting surface	0.006—0.016

Cylinder bore

Permissible out-of-round and conicity of cylinder bore	0.014
Permissible roughness of cylinder bore	0.002—0.004
Permissible waviness of cylinder bore	50 % of roughness
Honing angle	25°
Chamfer of cylinder bores	refer to Fig.

Self-made tool



Mandrel for pressing or knocking out cylinder liners

Note

Always install approved cylinder liners only (refer to spare parts data).

Owing to different manufacturers, the cylinder liners are identified with notches at lower edge.

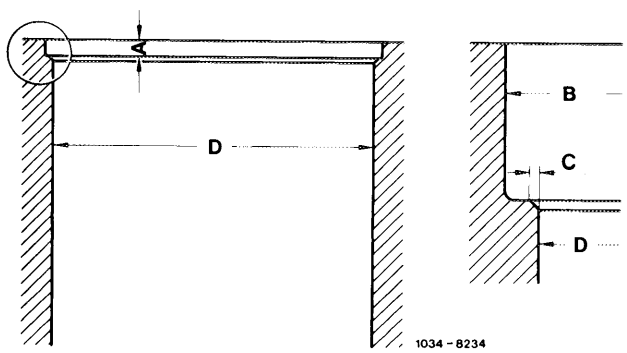
1 notch = Teves; 2 notches = Pleuco;
3 notches = Wizemann; 4 notches = Brico

Renewal

1 Press out cylinder liners with self-made mandrel and a press or knock out with a hammer.

2 Thoroughly clean basic bore.

A = 4.3–4.6 mm
B = 96.02–96.08 mm
C = 0.25–0.35 mm
D = 94.000–94.035 mm



3 Measure basic bore (D) in cylinder crankcase.

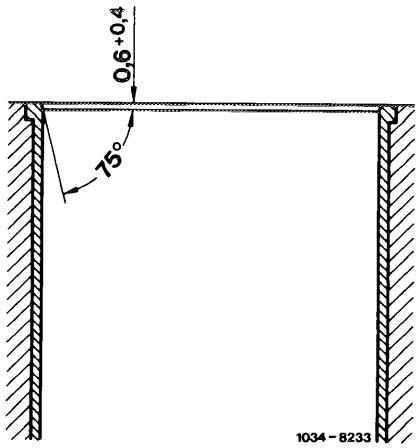
If the out-of-true condition exceeds 0.1 mm, do not use cylinder crankcase any longer.

4 Position new cylinder liners. Place steel plate of pertinent size on liner flange and press-in liner with a press or knock in with a hammer.

After pressing or knocking in cylinder liner, leave for another approx. 7 seconds under press (setting pressure) or add a few setting blows with hammer.

5 Mill or grind off projecting liner flange. Remove as little as possible from cylinder crankcase parting surface. Guide milling cutter or grinding wheel centrally over cylinder bores.

6 Enlarge cylinder liner bores in two steps. For honing, leave an allowance of 0.03 mm in bores.



7 Chamfer cylinder liners.

8 Hone cylinder bores.

9 Measure cylinder bores and select pertinent pistons (02–316).