

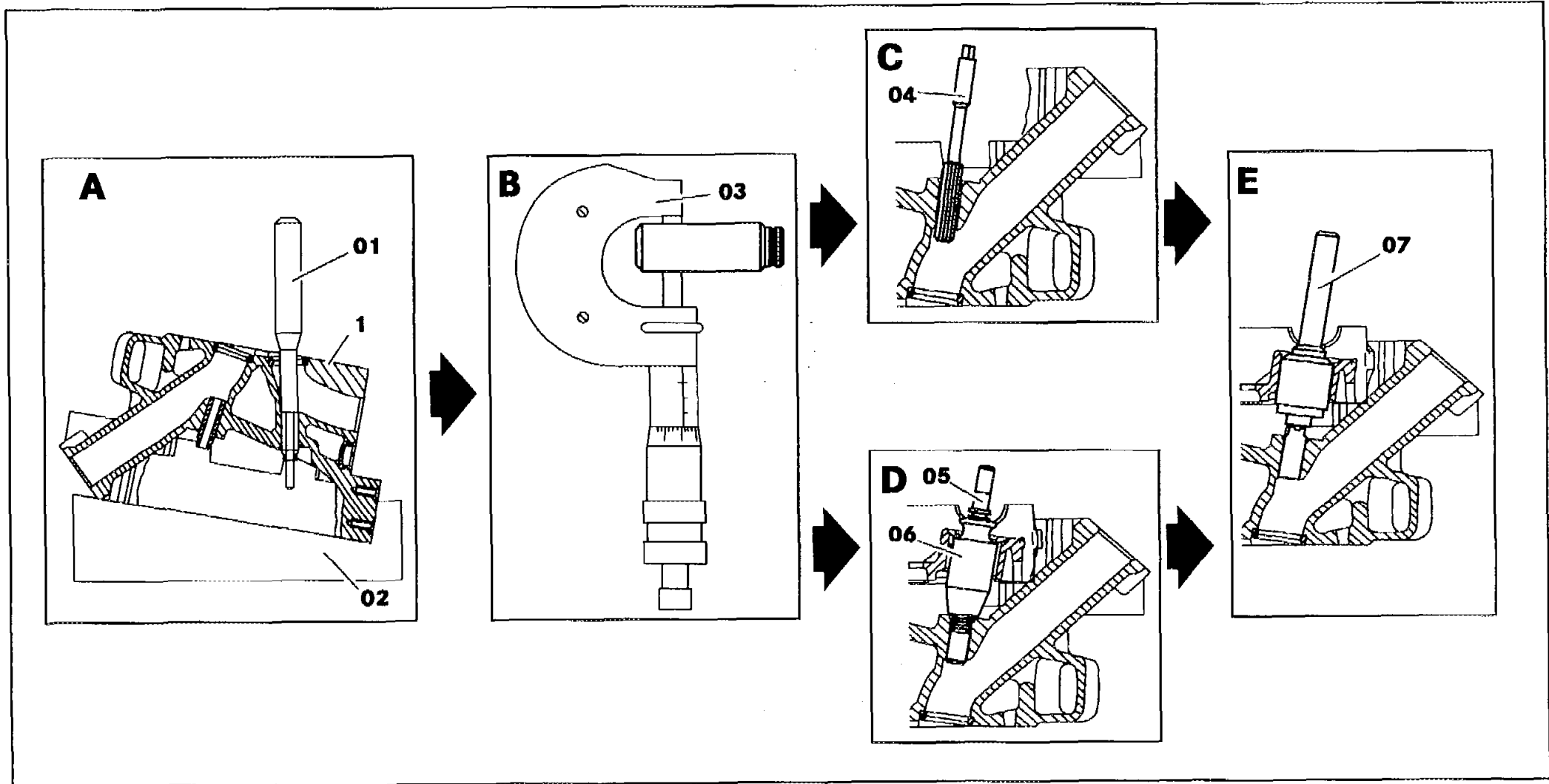


J5






AR05.30-P-3731A

Inspecting, removing, installing valve guides






ENGINE 604, 605, 606



A	Knocking out valve guide	01	Removal drift
B	Examine \varnothing of valve guide knocked out	02	Supports
C	Reaming basic bore in cylinder head to standard size I	03	Micrometer
D	Broaching basic bore in cylinder head to repair size I	04	Reamer
E	Inserting valve guide	05	Broaching tool
		06	Guide sleeve for broaching tool
		07	Insertion drift with guide

	Removal, installation		
 BT	Material and dimensions of valve guides modified		BT05.30-P-0001-01A B18
1	Remove cylinder head	Models 124, 140, 202, 210	AR01.30-P-5800HA
		Model 463	AR01.30-P-5800GG
2	Remove valves		AR05.30-P-3511B D5
3	Knock out valve guide		AR05.30-P-3731-01A K16
4	Measure valve guide outer \varnothing	 Use a micrometer to measure and to determine which valve guide was installed; install next larger valve guide corresponding to valve guide installed; for this purpose ↓  Ream basic bore to standard size I or ↓	BE05.30-P-1001-02A AR05.30-P-3731-02A L16



		<p> Broach basic bore to repair size I</p> <p> Standard size valve guides are not supplied as replacement parts as the overlap which would exist would not be sufficient when they are installed.</p> <p> The valve guides do not have a circlip as of 11/94.</p> <p></p>	AR05.30-P-3731-04A N16
5	Insert valve guide, examine		AR05.30-P-3731-03A P16
6	Examine concentricity of valve seat; machine if necessary		
7	Install in the reverse order		

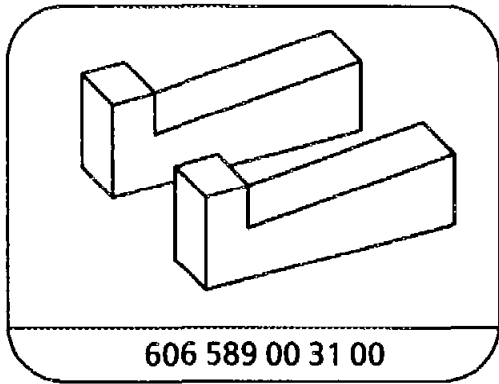
Test data of valve guides

Number	Designation		Engine 604, 605, 606 1st version up to 11.94	Engine 604, 605, 606 2nd version as of 11.94	
BE05.30-P-1001-02A	Valve guide basic bore in cylinder head	Standard size	mm	12.5-12.51	12.5-12.51
		Standard size I	mm	12.53	12.53
		Repair size I	mm	12.70	12.70
BE05.30-P-1002-02A	Valve guide outer \emptyset	Standard size	mm	12.54-12.55	12.54-12.55
		Standard size I (color: grey)	mm	12.56-12.57	12.56-12.57
		Repair size I (color: red)	mm	12.74-12.75	12.74-12.75
BE05.30-P-1004-02A	Valve guide inner \emptyset	Inlet valve guide	mm	6.000-6.015	6.000-6.015
		Exhaust valve guide	mm	6.000-6.015	7.000-7.015
BE05.30-P-1005-02A	Valve guide length	L	mm	37.5	37.5
		Fig. see		AR05.30-P-3731-03A	AR05.30-P-3731-03A
BE05.30-P-1006-02A	Overlap in cylinder head		mm	0.029-0.051	0.029-0.051
BE05.30-P-1007-02A	Material sintered metal \Rightarrow 1	Inlet valve guide		1	1
	Material grey cast iron \Rightarrow 2	Exhaust valve guide		1	2

Number	Designation	Engine 604, 605, 606 1st version up to 11.94	Engine 604, 605, 606 2nd version as of 11.94
BE05.30-P-1009-02A	Dimension	a	mm
		b	mm
		c	mm
		Fig. see	AR05.30-P-3731-03A

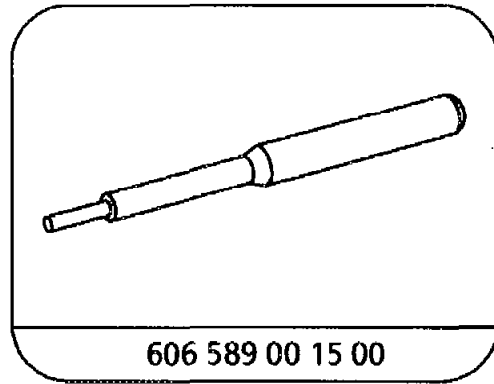
Nm Camshaft

Number	Designation	Engine 604, 605, 606
BA05.20-P-1003-01A	Bolt of camshaft housing to cylinder head	Nm 15



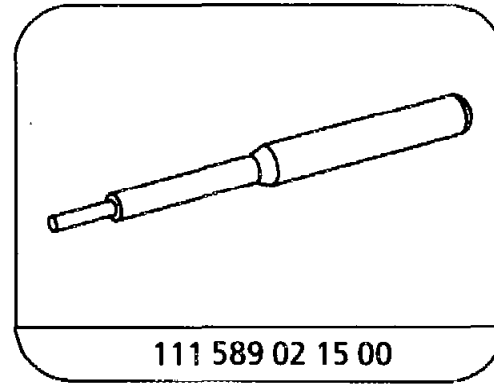
606 589 00 31 00

Supports (1 pair)



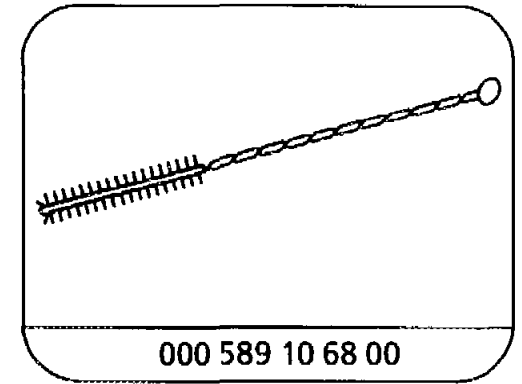
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Drift



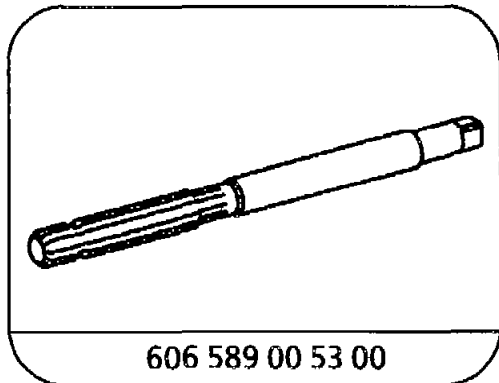
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Drift



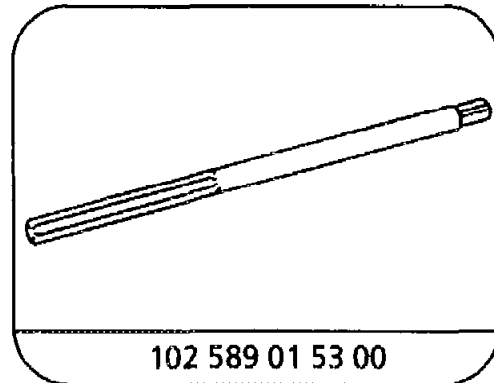
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Cylinder brush



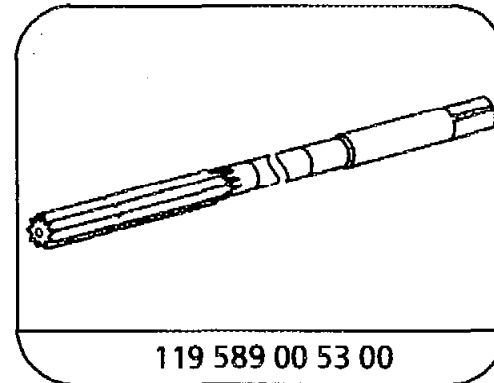
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Reamer



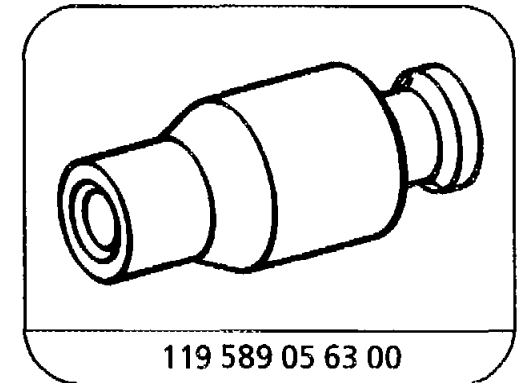
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Reamer



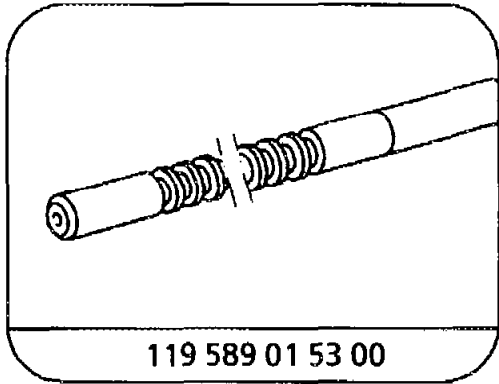
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Reamer



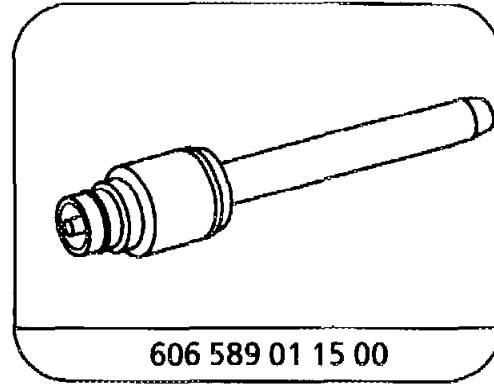
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Guide sleeve



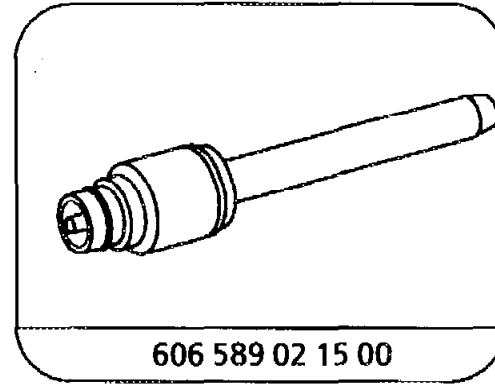
119 589 01 53 00

Broaching tool



606 589 01 15 00

Drift



606 589 02 15 00

Insertion drift

Commercially available tool

Number	Designation	Make (e.g.)	Order number
WH58.30-Z-1005-12A	Micrometer 0 – 25 mm	Hahn und Kolb Borsigstr. 50 70469 Stuttgart	