Operation No. M 73c

Reconditioning of Idler Gear and Idler Gear Support

Types 220 and 220a

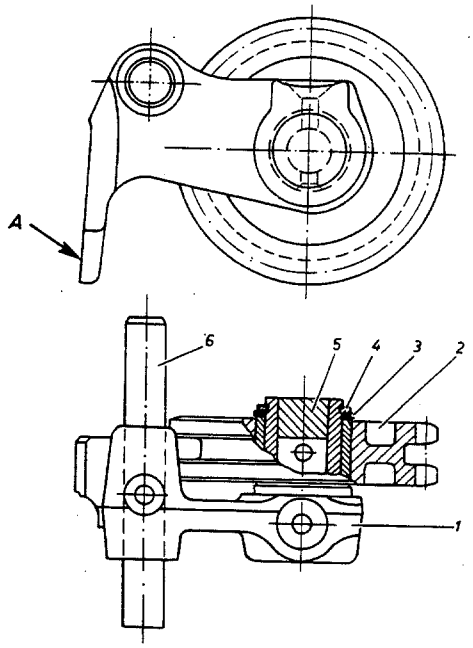

Fig. M 73c/00

1 Idler gear support with pin
2 Idler gear with bearing bushing
3 Washer
4 Lock ring
5 Taper plug
6 Bearing pin for idler gear support in cylinder head

Flush oil chamber in pin carefully after the various parts have been disassembled and cleaned. If necessary, drill taper plug out, remove oil sludge and install a new plug.

As a rule, the nose of the idler gear support will be deformed at the point against which the pressure piece of the chain tensioner bears (at A in Fig. M 73c/00). Smooth deformed spots carefully.

Table 29

Diameter of pin 6	Bore in idler gear support	Diameter of pin 1	Finished size of bushing in idler gear	Rough-turned size of bushing in idler gear
9.995 / 9.986	10.000 / 10.015	19.980 / 19.959	20.000 / 20.021	19.600 / 19.730
(0.393504) / (0.393150)	(0.39370) / (0.39429)	(0.78661) / (0.78578)	(0.78740) / (0.78823)	(0.77165) / (0.77677)

Check pins and bores for wear.

Side play of idler gear 0.020–0.062 mm (0.0008–0.0024″)

Side play of idler gear support on pin in cylinder head 0.005–0.029 mm (0.0002–0.0013″)

If bushing in idler gear is worn, press it out and install a new bushing with rough-turned bore.

At the rear the bushing must project 0.75 mm (0.03″). See Fig. M 73c/01.

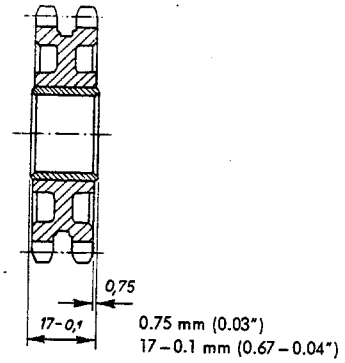

Fig. M 73c/01

Before pressing in the new bushing, support idler gear in the bore and equalize teeth slightly at circumference (Vertical out of true 0.02 mm = 0.0008″). After the teeth have been corrected, press bushing in and finish bore of bushing to 20.000–20.021 (0.78740–0.78823″).

Support gear at circumference on the teeth.

Max. lateral out of true of gear with gear supported in bore and checked at the circumference: 0.02 mm (0.0008″).

Max. vertical out of true of teeth, checked at the circumference: 0.02 mm (0.0008″).

If the idler gear support shows signs of wear at pin or in bore for pin (6), it must be exchanged.

After the idler gear support has been installed in the cylinder head, **fill oil chamber in pin for first running of the engine.**