

# Repairing of Idler Sprocket and Idler Sprocket Support OM 621

Job No.

05-24

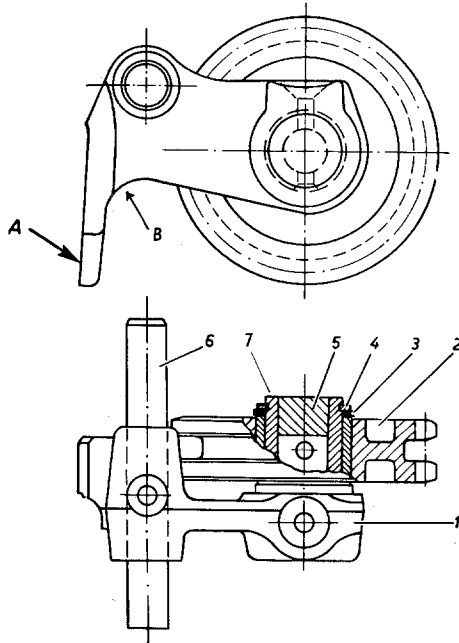


Figure 05-24/1

- 1 Idler sprocket support with pivot pin
- 2 Idler sprocket with bushing
- 3 Washer
- 4 Locking ring
- 5 Conical plug
- 6 Idler sprocket support pivot pin in cylinder head
- 7 Idler sprocket pivot pin

1. Remove the locking ring (4), the washer (3) and then the idler sprocket (2) (see Figure 05-24/1).
2. After disassembling and cleaning of the individual parts, thoroughly rinse the bore in the pivot pin which is closed by the plug (5). If necessary, bore the conical plug (5) out, remove the oil sludge and knock in a new conical plug (see Figure 05-24/1).

## Idler sprocket and idler sprocket support Measures in mm

Dia. of pivot pin 6	Bore in idler sprocket support	Dia. of pin 7	Finished measure of bushing in idler sprocket	Rough-turned measure of bushing in idler sprocket
$\frac{9.995}{9.986}$	$\frac{10.000}{10.015}$	$\frac{19.980}{19.959}$	$\frac{20.000}{20.021}$	$\frac{19.600}{19.730}$

3. Usually, the lug of the idler sprocket support is indented at the spot A, where the pressure pin of the chain tightener is seated (see Figure 05-24/1). Remachine indented spots.
4. Check the pivot pins and bores for wear.
  - Radial clearance of the idler sprocket (2)  $0.020-0.062$  mm
  - Radial clearance of the pivot pin (6) in the idler sprocket support  $0.005-0.029$  mm

If worn out, the bushing in the idler sprocket should be pressed out; press in a new bushing with pre-turned bore. The bushing should project by 0.75 mm on both sides (see Figure 05-24/2).

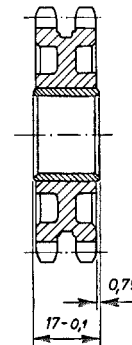


Figure 05-24/2

Before pressing in a new bushing, fix the idler sprocket in the bore and slightly finish the sprockets at the circumference (vertical out-of-true 0.02 mm). After finishing the sprockets, press in the new bushing, fixing the idler sprocket at the sprocket circumference and finish the bore of the bushing (20.000-20.021 mm).

Lateral out-of-true of the sprocket when supported in the bore, measured at the circumference  $\text{max. } 0.02$  mm  
 vertical out-of-true of the sprocket, measured at the circumference  $\text{max. } 0.02$  mm.

If the idler sprocket support shows wear on the pivot pin (7) or in the bore for the pin (6), do not fail to replace the idler sprocket support (1) (see Figure 05-24/1).