



STEWART ENGINEERING

THE SUNBEAM SPECIALISTS

Sunbeam Service Sheet No. 12

Subject: Timing Chain *Tensioner fitted to Engines with S.7 Prefix*

Date: April 1952

To overcome premature failure of the tensioner and spring, the complete assembly has been redesigned. The modified Chain Tensioner Conversion Set complete, Part number 89-165, can be fitted to all engines bearing the S.7 prefix. For engines bearing the S.8 prefix see Sunbeam Service Sheet No. 11.

The complete engine unit must first be removed from the frame and the gearbox and clutch detached from the engine.

Take off the timing cover and remove the half time gear, camshaft sprocket and existing chain tensioner blade and spring.

Bend back the lock washer and remove the existing blade pivot pin and replace with the new lock washer and pin No. 89-116. Ensure that the lock washer is bent over the stud hexagon and the flat on the crankcase.

Remove the nut and spring washer from the end cover stud immediately below the pivot pin (*marked "X" in drawing overleaf*) and extract the stud. Replace with the new stud 89-136 and replace the original nut and spring washer.

Remove the inspection cover and washer from the side of the crankcase.

Feed the new chain tensioner blade 89-117 on to the pivot pin and insert the bush 89-118.

The retaining clip 89-119 can now be fitted over the end cover stud and pivot pin and secured by nut 1B - $\frac{5}{16}$ " and spring washer N 566, as shown in scrap section "AA"

Re-assemble the half time gear, camshaft sprocket and chain following the timing procedure given in the Instruction Manual.

Unscrew the two (2) round head screws and take off the cover and fibre washer from the new steady assembly.

Slacken off the $\frac{1}{4}$ " bolt (*marked "Y" in drawing overleaf*) and fit the assembly into the crankcase using the two screws originally removed from the inspection cover to secure it in position.

Turn the engine until either of the exhaust valves is partly open then tighten bolt "Y" securely.

Replace the steady cover and large fibre washer, making sure that the two (2) small fibre washers are fitted under the heads of the two (2) round head screws.

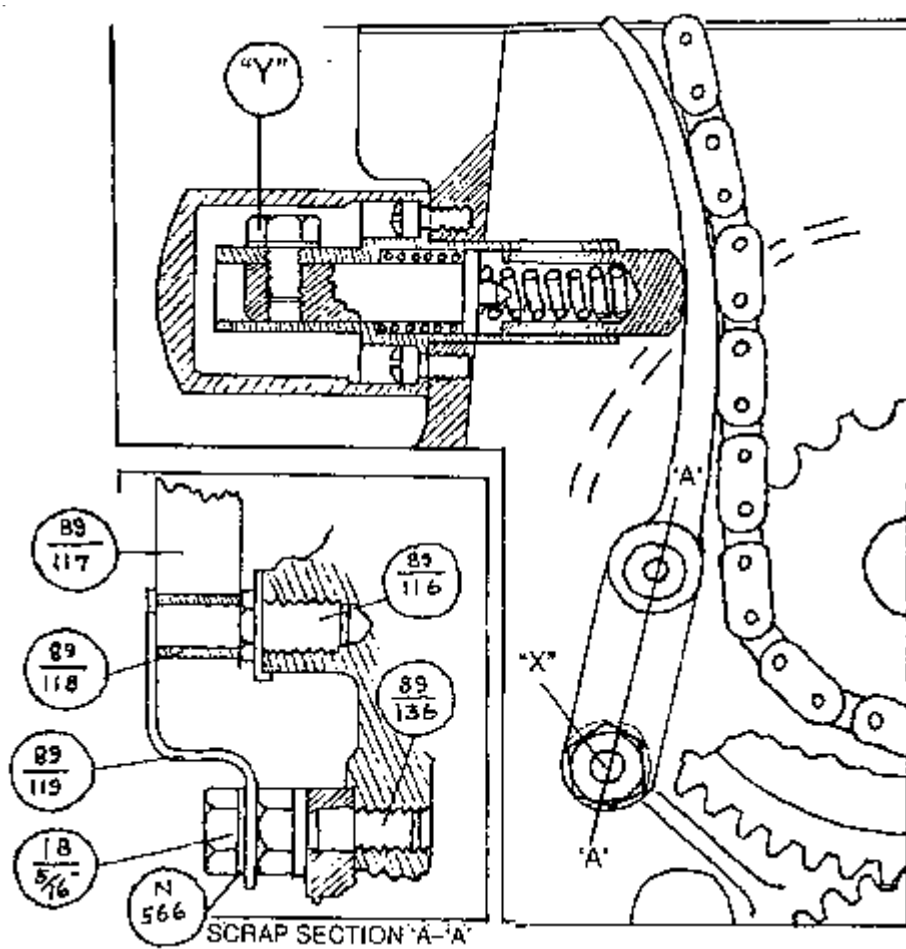
The engine unit can now be replaced in the frame in accordance with the directions given in the Instruction Manual.

Complete assembly No. 89-165.



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SERVICE DEPARTMENT
B.S.A. CYCLES LIMITED