

## BSA M20 toolbox: an overview



### Introduction

Every now and then I receive questions about BSA M20 toolboxes, such as: 'Which type of toolbox do I need for my 1940 project?' or 'Which knob should be on my toolbox?'. The aim of this article is to clarify which type of toolboxes and variations exist and thereby answering these questions at once.

### Production

Those of you who have studied WD motorcycles from various makes may have noticed some similarities between the toolboxes. Especially the toolboxes from Royal Enfield WD/C, WD/CO, BSA M20 and Ariel WNG have a lot in common. The BSA pre war triangular shape toolbox, for example, is almost the same as the one that was used on Ariel WNGs. This is most probably because these toolboxes were all made by the same subcontractor. The subcontractors focused on specific parts which required a specialized production technique (see also Lucas or Miller for electrical components, Lycett or Terry for saddles, Dunlop or Goodyear for tyres). Perhaps this was also the case with the toolboxes and we think that Royal Enfield, BSA and Ariel all used that same supplier. Deep drawn steel pressing is the technique used to make all these toolboxes. This technique requires a large size hydraulic press and skilled personnel. There were a few companies in the UK specialized in this technique in the 1930's and 1940's. One of these companies was Fisher and Ludlow, based in Birmingham. It seems logical that this company made the toolboxes, but so far I have not found any evidence to confirm this theory.

### Toolbox types and variations

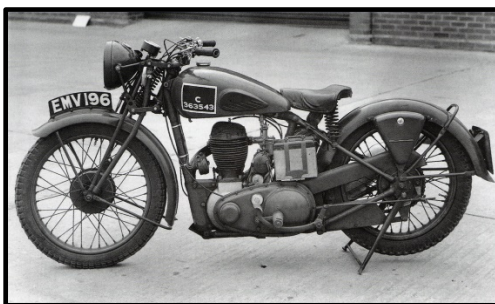
Below I will describe 7 different types/variations of the BSA M20 toolboxes, variations in the shape of the toolbox or the knob to lock the lid of the toolbox.



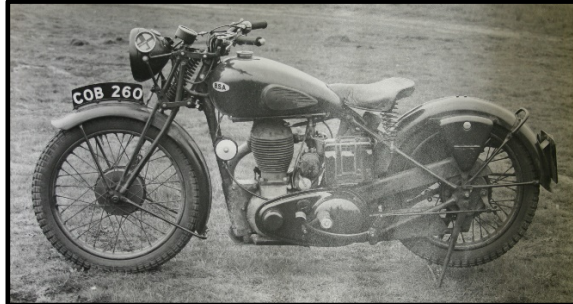
*Several different types of toolbox knobs as used on BSA M20.*

### 1. Triangular shape toolbox

The triangular shaped toolbox was introduced in 1936 for BSA M models and remained in use till 1938. Two of these toolboxes were fitted to M models, on each sides of the rear wheel one. These toolboxes are not identical, both have different part numbers. The left hand side toolbox had a cut out for fitment around the upper chainguard. The 1936 and 1937 War Office BSA M20 prototypes had only one toolbox fitted, the one on the left hand side.



1936 BSA WM20



1937 BSA WM20

### 2. Civilian, "oval" shape toolbox

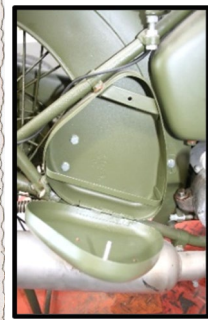
In 1939 a different type of toolbox was introduced, a more "oval" shaped toolbox. This type remained in use till 1940. The location of the toolbox also changed, it was mounted on the right side close to the gearbox. This type of toolbox was used on civilian M20's, Dutch Army WM21's and impressed M20's.



Toolbox on Dutch Army WM21

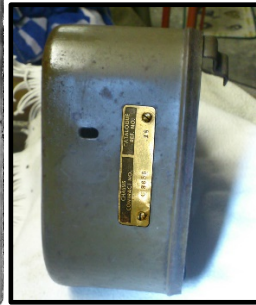


Impressed BSA M20 left behind by the BEF in France.



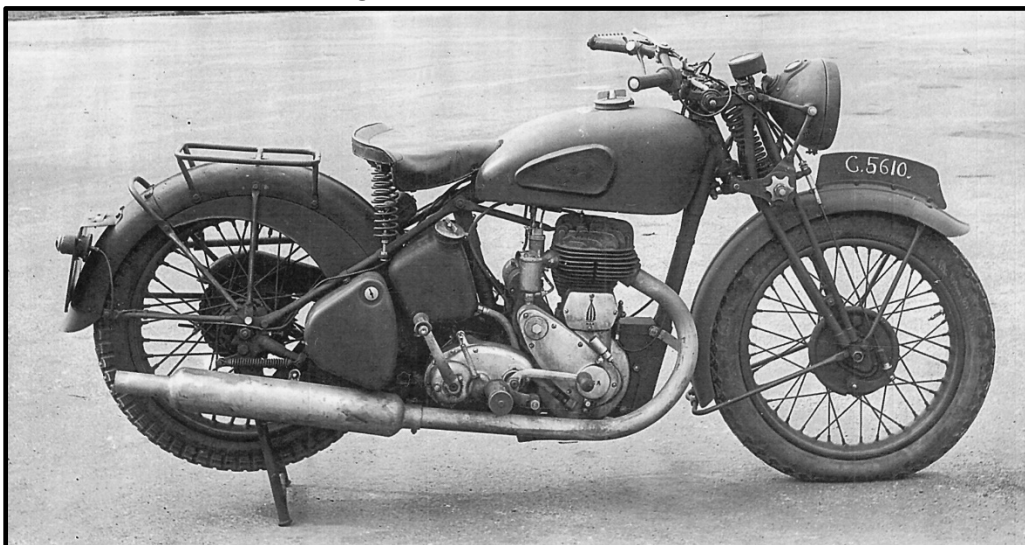
### 3. Integrated lock, wide type

Another toolbox was introduced, at the same time as the introduction of the civilian "oval" shape toolbox in 1939. This type was 3,6 cm wider then the civilian "oval" type, it had an integrated lock which required a separate key and was specifically for the War Office M20's. The wider toolbox was needed to create space for the additional equipment ordered by the War Office. BSA M20's from the following War Office contracts were fitted with this toolbox A9764, C3139, C3655.



#### 4. Flat round knob, wide type

In the last months of 1939 another variation of toolbox was introduced for the M20's delivered to the War Office. This variant had a large round knob which screwed on a threaded rod to lock the lid. The shape of the toolbox remained the same, the wider type continued in use. At some point an improvement to the lid of the toolbox was made. This improvement consisted of a thin metal cable (very similar to a gas throttle cable) which prevented the lid from touching the silencer when it was opened. This type was at least fitted to M20's in the following contracts: C7287, C5610 and C6654.

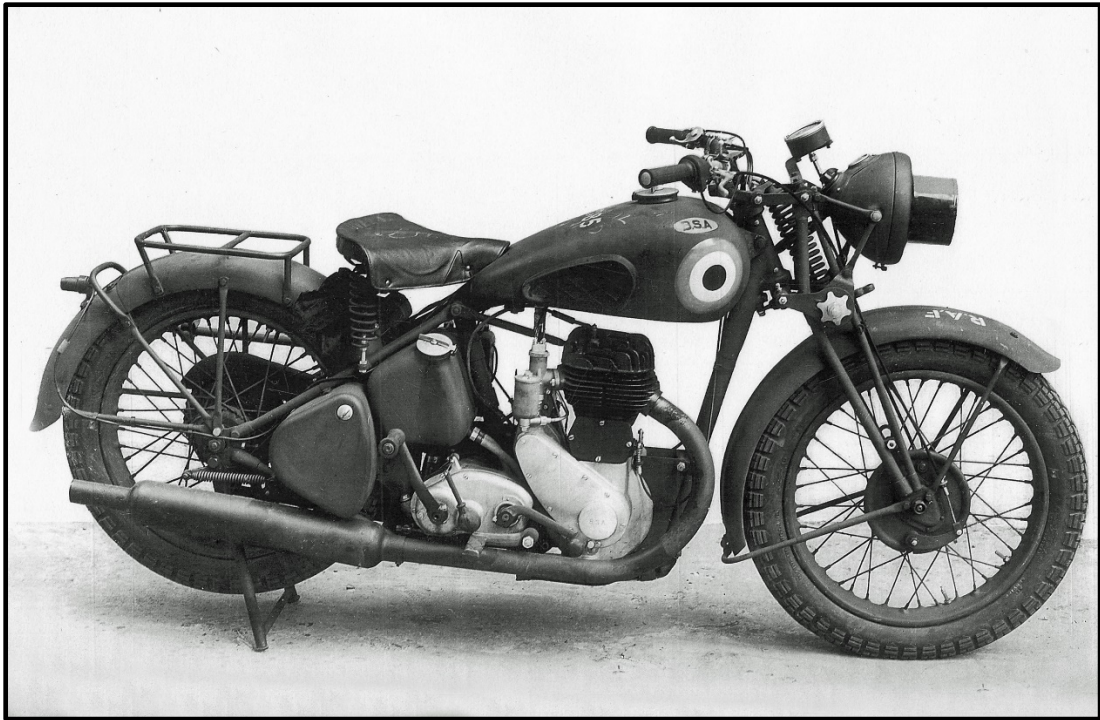




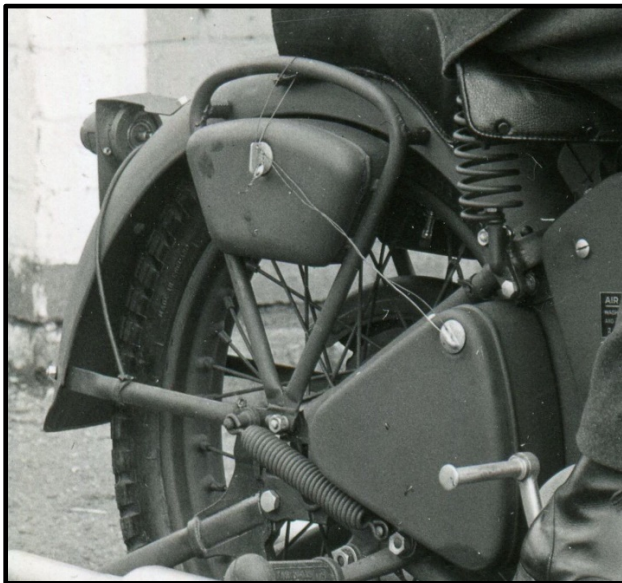
*Length of wire for lid: 8,9 cm.*

**5. Round pressed curvex knob, wide type**

At the end of 1940 a different type of toolbox knob was introduced. The reason for this was probably the disadvantage of the large flat round knob which could unscrew caused by the vibration of a moving M20. The lid of the toolbox would then open and the toolkit was lost. The pressed curvex knob had two small holes in it, meant to attach a locking wire from the knob to another part of the motorcycle and thereby preventing unscrewing of the knob. Two different types of pressed curvex knobs were produced and randomly used on toolboxes within War Office contracts. The shape of the toolbox remained largely the same, the wider type, but with a small adjustment to the lid as the pressed curvex knob didn't need a large round flat area as was common to the previous type. The pressed curvex knob was used till 1942 and can be seen mounted to M20's from contracts C7287 and C11101.



*BSA M20 from a RAF contract, photographed in the BSA factory.*



*Both type of pressed curvex knobs fitted to a Royal Enfield.*

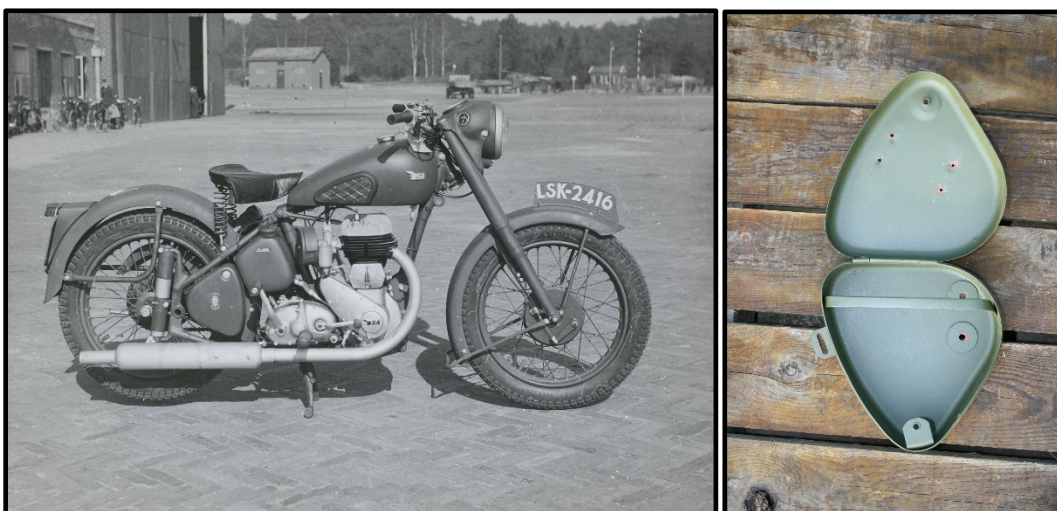
## **6. Toggle knob**

In 1942 the toggle knob was introduced, it remained in use till 1945. The toggle knob was finished in cadmium or 'rustproof black'. The shape of the toolbox remained the same. A special compartment to store the instruction book was added to the lid on the inside of the toolbox, possibly this compartment was already in use when the pressed curvex knob was introduced. The following War Office contracts were fitted with the toggle bar in the BSA factory: S1048, S2603, C13290, S5209.

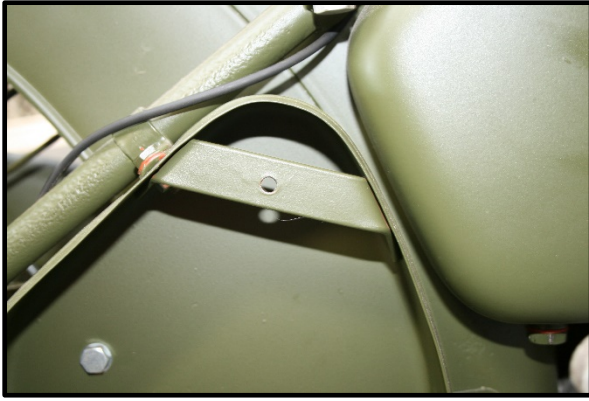


#### 7. Post war civilian toolbox

After 1945 the BSA factory returned to the pre war design of the toolbox. The narrower toolbox shape and pre war flat design of the toolbox knob were re-introduced. A small difference to the upper corner at the inside remained and makes it easy to distinguish pre- from post war toolboxes.



*Post war toolbox fitted to a Dutch Air Force BSA M21.*



*Pre war toolbox.*



*Post war toolbox.*