Merlin Engine Activity

The Rolls-Royce Merlin engine was used in many of the famous fighter aircraft during the Second World War – most notably, the Supermarine Spitfire and Hawker Hurricane.

The early Merlin engines had issues with the carburettor – this resulted in the engines cutting out during combat which could prove a real issue for even the most skilled of pilots. However, an engineer by the name of Beatrice Shilling invented a restrictor that prevented the engines from stalling, and as such, improved the engine. Used throughout the Battle of Britain, this feat of engineering meant that the RAF's fighter aircraft could continue to fight off the German Luftwaffe.

Put your engineering skills to the test and print out the templates and follow the instructions to build a replica of a Merlin engine!

You will need:

- Printed templates
- Scissors
- Glue stick

Note: ask for an adults help when using scissors.

Share your finished Merlin engine with us on social media!

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THE VERY SUCCESSFUL MERLIN ENGINE WAS DESIGNED AND DEVELOPED
BY ROLLS ROYCE DURING THE MID 1930S, FROM THEIR KESTREL ENGINE.

MERLINS WERE NOT ONLY USED BY ALL SPITFIRES DURING THE WAR,
BUT ALSO HURRICANES, MOSQUITOES AND MANY OTHER AIRCRAFT,
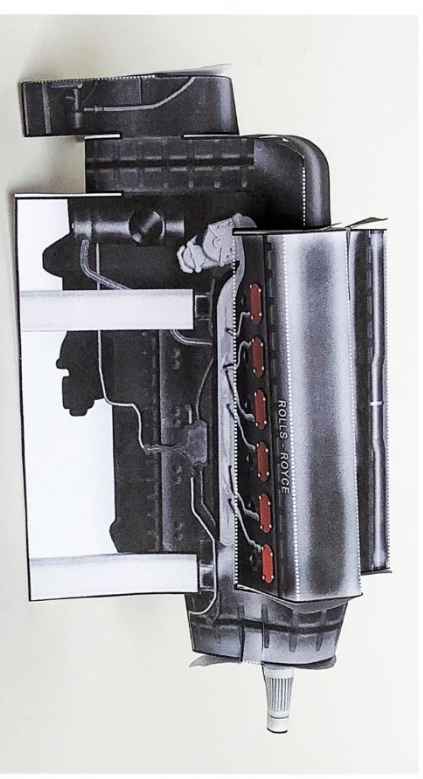INCLUDING THE US MUSTANG.

IN THE SPITFIRE IT PROVED A DEADLY COMBINATION THAT HELPED WIN
THE BATTLE OF BRITAIN AND EVEN THE SECOND WORLD WAR.
THE MERLIN III WAS FITTED TO THE SPITFIRE MK.I.

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HOW DO I MAKE IT?

Folding this model might be a bit challenging
in the middle, so if you need help ask an adult.

1. Cut-out all the 4 pieces.
   (Do not forget the cuts into the **ENGINE**!).
2. Fold all the dotted lines, to match the
   pictures of the finished model.

3. Glue **A** over **B**.
4. Glue **C** over **D**.
5. Glue **E** over **F**.
6. Glue **G** over **H**.
7. Glue **I** over **J**.
8. Glue **K** over **L**.
9. Glue **M** over **N**.
10. Bend **O** down into **C**.
11. Glue **P** over **Q** and bend it down into **G**.
12. Glue **R** over **S** and bend it down into **E**.
13. Bend the **SHAFT** in half and glue **T** over **U**.
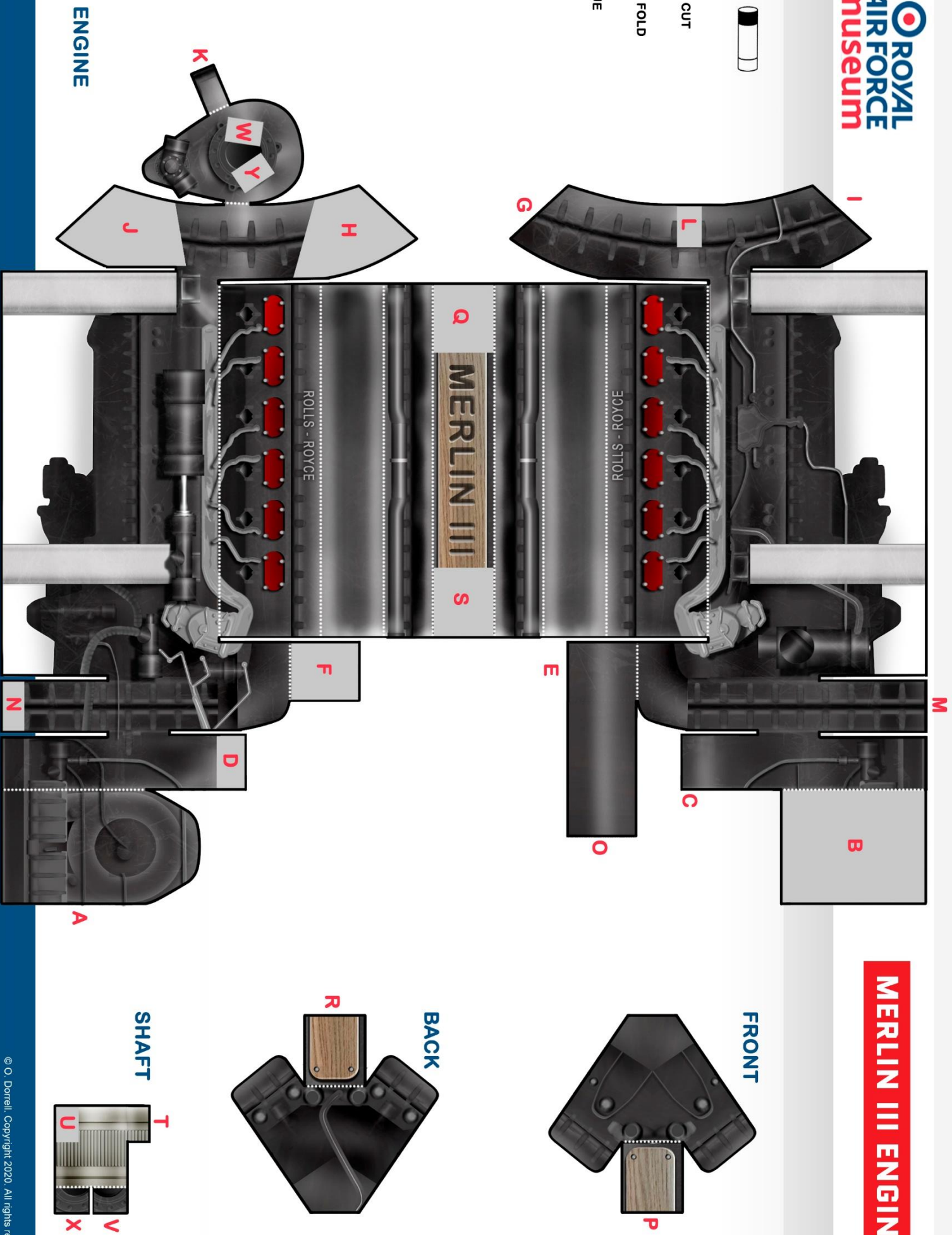14. Glue **V** over **W**.
15. Glue **X** over **Y**.

ROYAL
AIR FORCE
museum

GLUE
FOLD
CUT

MERLIN III ENGINE

ENGINE

ROLLS - ROYCE

MERLIN III

ROLLS - ROYCE

A

J

K

W

Y

H

G

L

I

Q

S

F

E

N

D

C

M

O

B

SHAFT

T

U

X

V

BACK

R

FRONT

P