Bob's Card Models

Westland Lysander Mk III ("Lizzie")   Scale: 1:36

The **Westland Lysander** was a British army co-operation and liaison aircraft produced by Westland Aircraft   immediately before and during 2nd World War. After becoming obsolete in the army co-operation role, the aircraft's exceptional short-field performance enabled clandestine missions using small, unprepared airstrips behind enemy lines to place or recover agents, particularly unoccupied France. Like other British army air co-operation aircraft it was given the name of a mythical or legendary leader, in this case the Spartan general Lysander.   Wikipedia

The V-9353 piloted by Flight-Lieutenant John Bridger DFC, was used on the night of 19-20 March 1943, to clandestinely drop, amongst others, General Derestraint and French hero Jean Moulin in the fields next to the river Loire in Burgundy, France.

Note the white-painted ladder rungs which are to aid quick agent pick-ups.

The Maly Modelarz Lysander gave me the idea of designing the plane, for printing at a better quality, and some parts may resemble those of Maly, but most have been quite radically changed.

Specifications (Wikipedia)

General characteristics

Crew :   1 pilot
Capacity :   1 passenger
Length :   9.29 m
Wingspan :   15.24 m
Height :   4.42 m

Wing area : 24.2 m^2
Empty weight : 1.984 kg
Max. take-off weight : 2.877 kg
Powerplant : 1 x Bristol Mercury XX radial engine, 870 hp (649 kW)

Performance

Maximum speed : 341 km/h at 1.520 m.
Range : 1.000 km
Service ceiling : 6.500 m.
Climb to 3.000 m : 8 minutes.
Takle-off run to 15 m : 279 m.

Armament

- **Guns:** Two forward-firing .303 in (7.7 mm) Browning machine guns in wheel fairings and two .303 Lewis guns for the observer

- **Bombs:** Four 20 lb (9 kg) bombs under rear fuselage and 500 lb (227 kg) of bombs on stub wings if fitted

----

<u>Building Instructions</u>


Fuselage and Bulkhead (red) parts
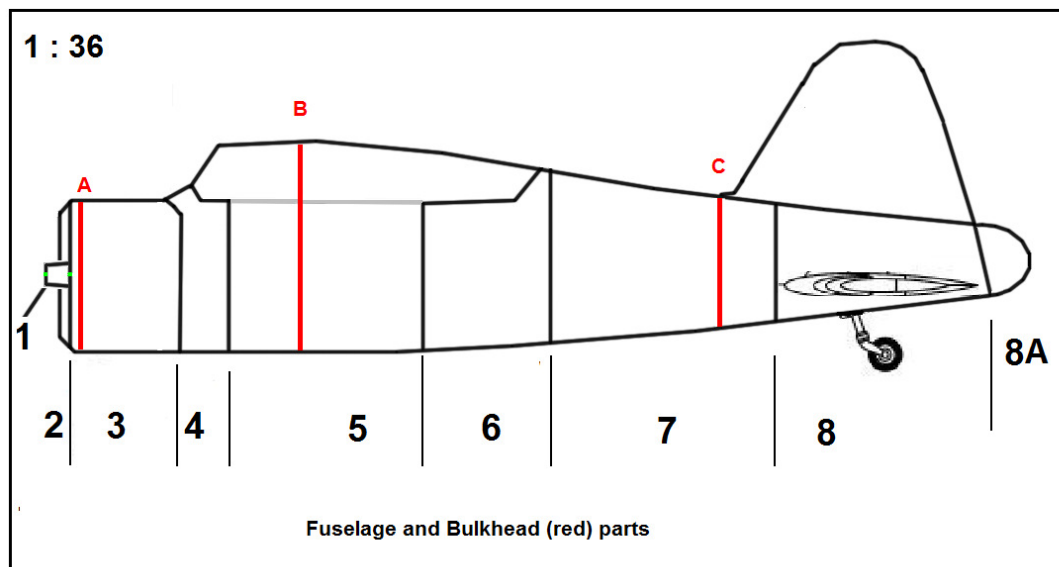
Print all sheets on between 160g card, except Instructions and Sheet 3   which should be printed on 90g Paper.
Always carefully fit parts together before gluing, and make minor adjustments if necessary.
Bright Green areas must be cut out, BUT only after gluing any folds. The Instructions will tell you when!
Although the model is relatively small, bulkheads have also been used to keep the correct cross-sectional form of the fuselage; therefore, they don't have to be glued all around, but rather tacked in place (do not tack on the green areas, which will anyway be cut off). The bulkheads should not be pressed in firmly, but loosely, otherwise after gluing, an unwanted ribbing effect is seen on the outside.
Make sure that the bulkheads are correctly installed - lined up with the **<u>external</u>** seam.

1. Cut out part **8**, round with a rod, cut out green area for fin
2. Assemble and glue/close fin **16**.
3. Bend fin tabs 90° outwards, insert and glue in place in **8**.
4. Glue on tab **8/8A**.
5. Glue on part **8A**, then close/glue rear end.
6. Close/glue part **7**, glue on the tab **7/8**.
7. Join **7** and **8**.
8. Insert/glue bulkhead **C**.
9. Close/glue part **6**, glue on the tab **6/7.**
10. Close/glue **5**, and glue on the 2 tabs **5/6**. Cut out green area in B/H B. Insert B/H **B** in position just behind the 2 <u>rear</u> green points on the top of the cockpit (use a pin as barrier stop).
11. Join **6** to **7**, then **5** to **6**.
12. Join **4** to **5**.
13. Close/glue **3**, then **3A** onto inside front of **3**. Close/glue **2**,then clap down and glue **1**.Glue to the front of **3**.
14. From the rear of **3,** insert/glue **A** into **3**.
15. Insert 2 Main Wing supports through the green holes in the top of the cockpit. For these I use 2 tooth-picks, ca. 8cm long. Glue spars in the positions shown.
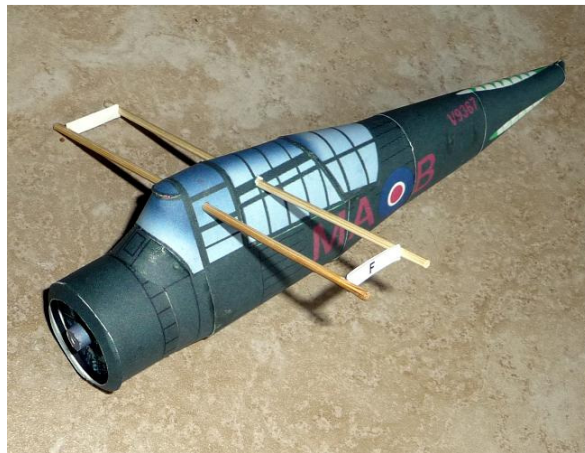
MAIN WING
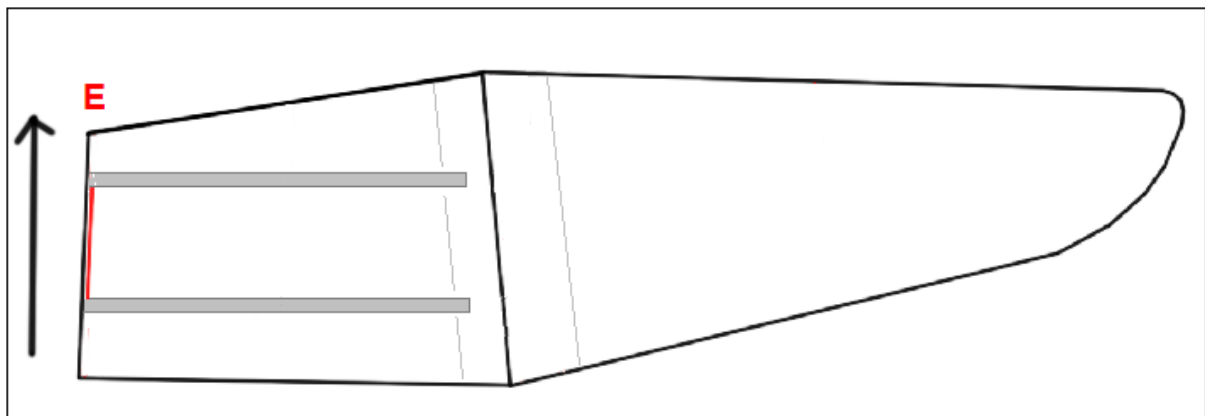
16. Cut out **9R**, glue Wing Connector **10** in position, at present only gluing to the <u>outer</u> wing tip, and close/glue the lower surface of the wing tip.
17. Glue/close <u>inner</u> surface of wing tip/.
18. Likewise for the left wing **9L**.
19. Finish off the join wing-fuselage with the 2 parts of flashing **11L** and **11R**, if necessary
   .

UNDERCARRIAGE / WHEELS
20. Assemble **12**. When dry, cut out all green areas, and bend down the tiny tabs on top of the unit. Trim **A** to size.
21. Assemble Drop Fuel Tank 26, and glue in place under the fuselage in the green slit marked.

22. Cut out and assemble wheel strut **13**, pass through fuselage (green slits cut out on either side of the front of the cockpit). Glue in place bending to the correct angle. Insert a tooth-pick inside the external arms to give a bit of profile; glue in place inside the respective wheel casings.
23. Assemble the 2 wheel casings **12**, glue onto ends of **13**., and bend each so that they make an angle of 90° to each other.
24. Assemble and glue the slanting struts **14**, and glue in place under the wings and on the wheel strut **13**.
25. Assemble the 2 main wheels **20**,
26. Assemble rear wheel **19**, and glue in place on **18**.

REAR WINGS and FIN

27. Cut out rear wings **17**, glue spar **17B** in place on the lower surface, close/glue wing. Insert in slit in fuselage, and glue in place.

PROPELLER

28. Assemble **21**, glue on nose cone **22**, and glue onto a tooth-pick or cocktail stick.

Add the Agent's Ladder **23** and aerial **24** under fuselage, as well as the exhaust **25** .
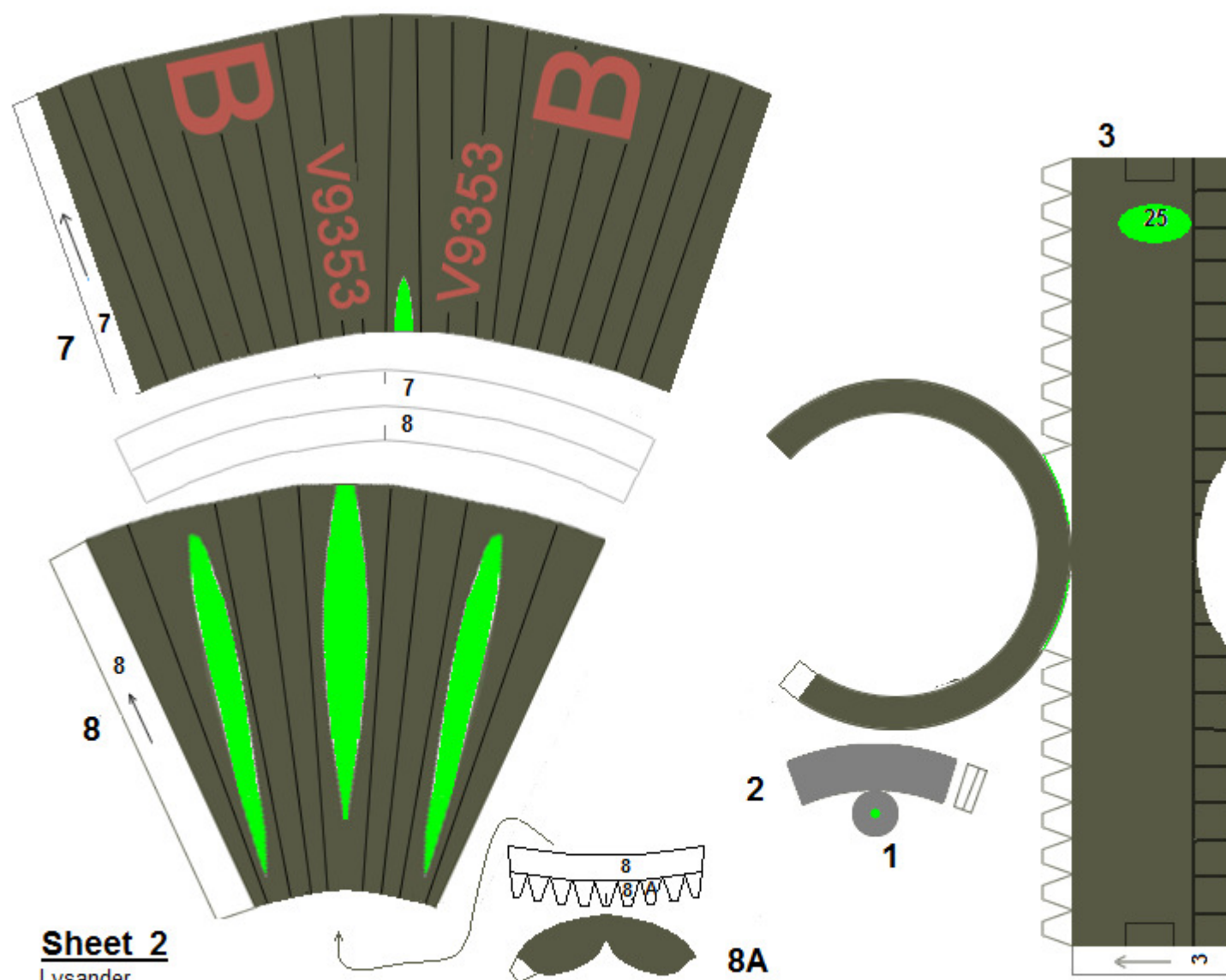Where necessary, cut flashing from Sheet 8 to cover construction numbers (wing struts) and any wing joins.

---oooOooo---

4

4

4
5

4

4
5

5

5
6

5
6

Glue on part 5

6

6
7
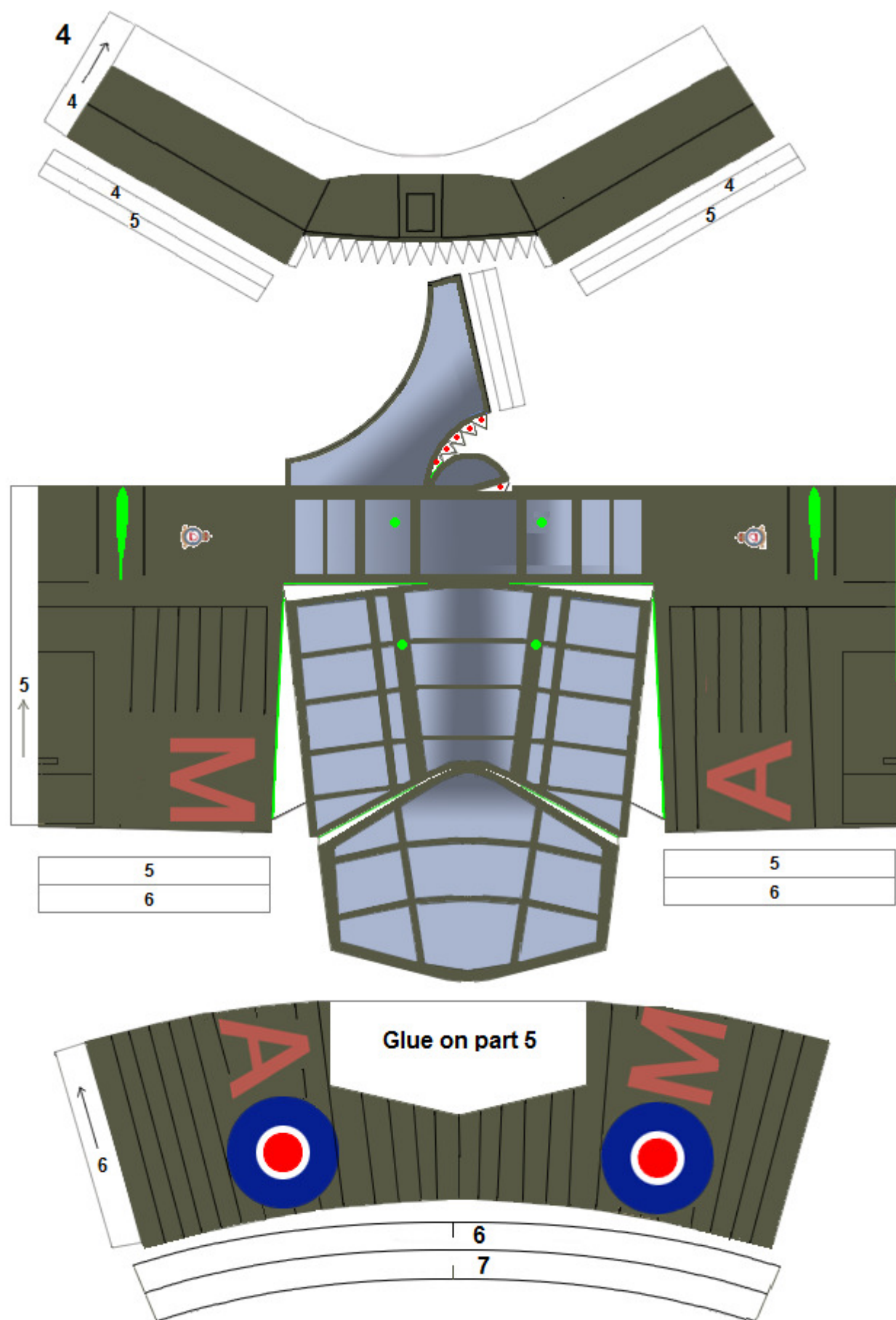
Sheet 1
Lysander

The tabs on each part are marked with the
part number, & arrow pointing forwards.

R 14 LEFT F   F   14 RIGHT R

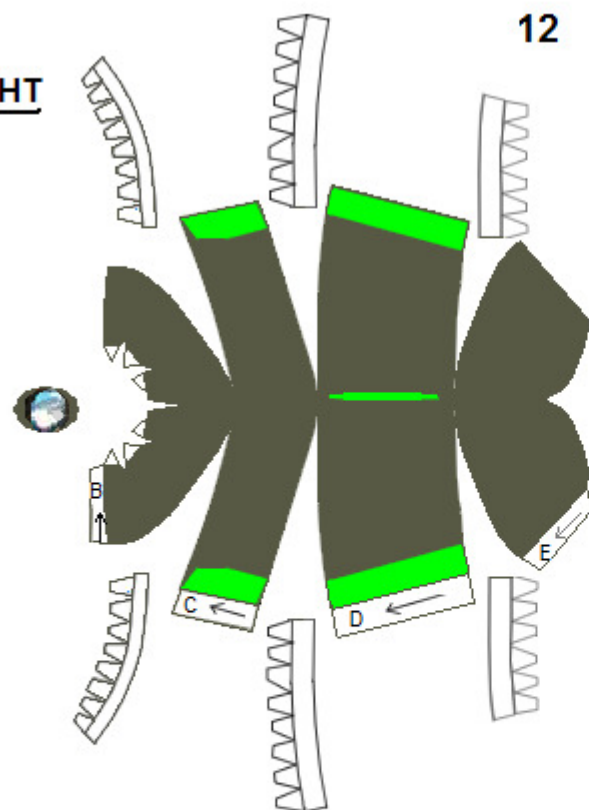Bend tabs outwards, then ....

glue back to back.

Bend tabs outwards, then ....

glue back to back.

Struts joining Wing to Fuselage Struts

B B V9353 V9353

3

25

7 7

7

8

8

8

2

1

7

8

8
8A

Sheet 2
Lysander

8A

3

RIGHT

12

B

C

D

E

12

LEFT

B

C

D

E

E	• G
E	• G
F	• H
F	• H

Spars E to H: make 3x thick

18

strengthen
with card

Rear Undercarriage

3A

13

Leading edge

Right

| BOTTOM | Inside | Fuselage | TOP |

14R

14L

FRONT UNDERCARRIAGE

Left
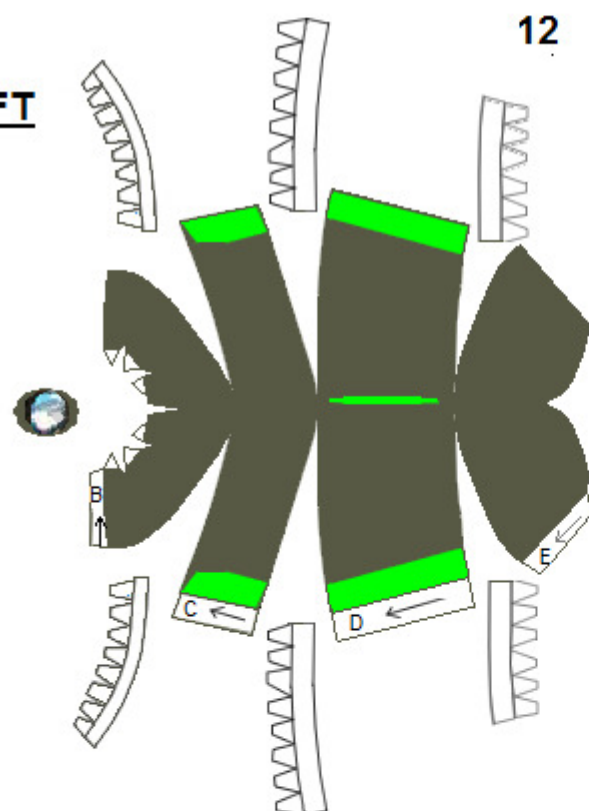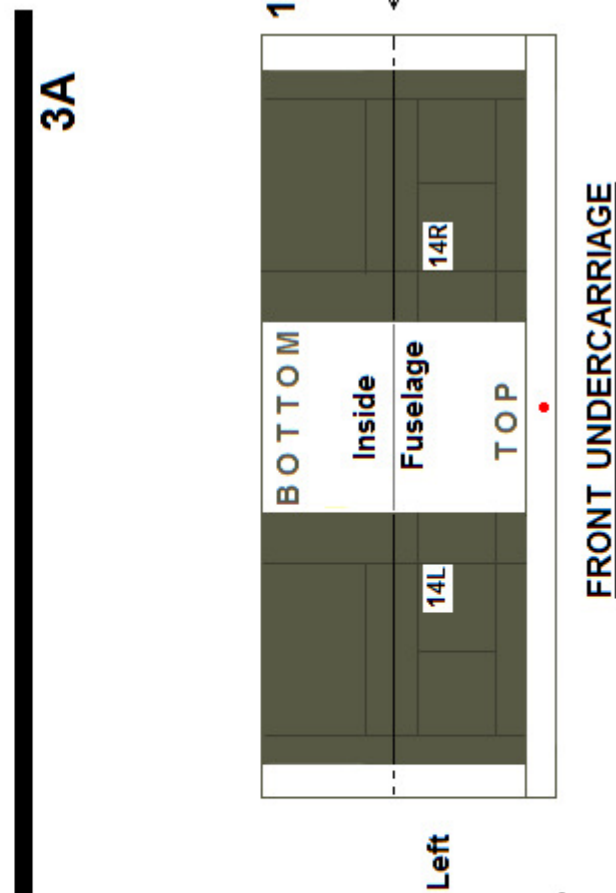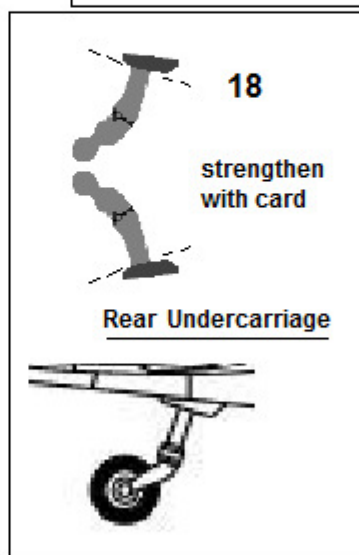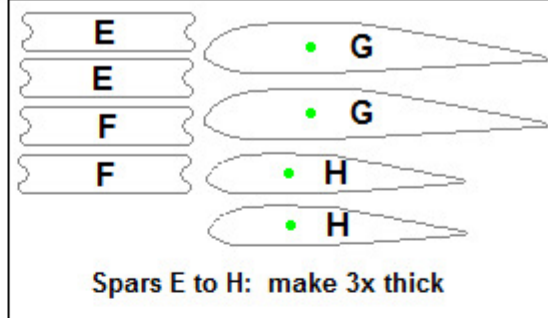
Sheet 3
Lysander

BOTTOM   TOP

9R

Bulkheads B/H A - C

Make 3x thick. Cut out green circles, as an aid to inserting with tweezers.

A

B

C

H

10

G

F

E
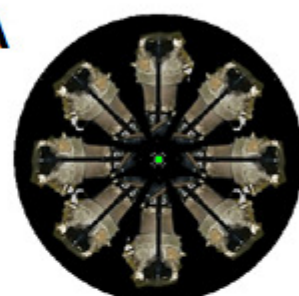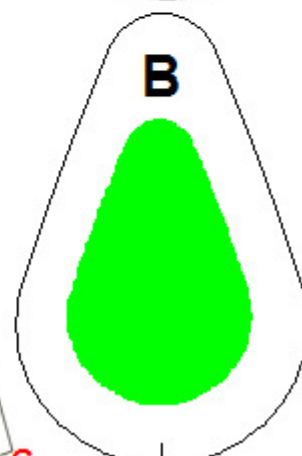
BOTTOM   TOP

19

Sheet 4

Lysander

The tabs on each part are marked with the part number, & arrow pointing forwards.
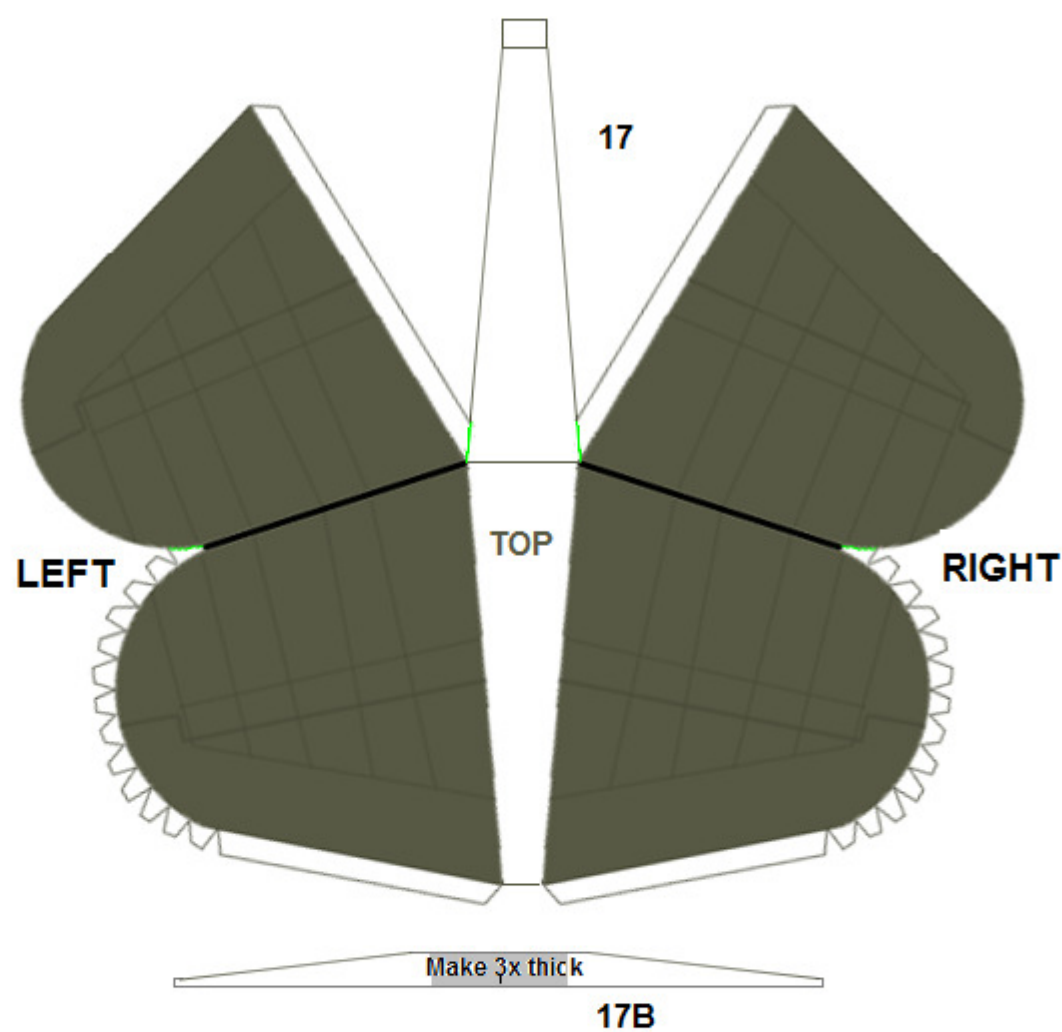
© Bob Schedler 2011

BOTTOM   TOP

E

F

10

G

H

9L

BOTTOM   TOP
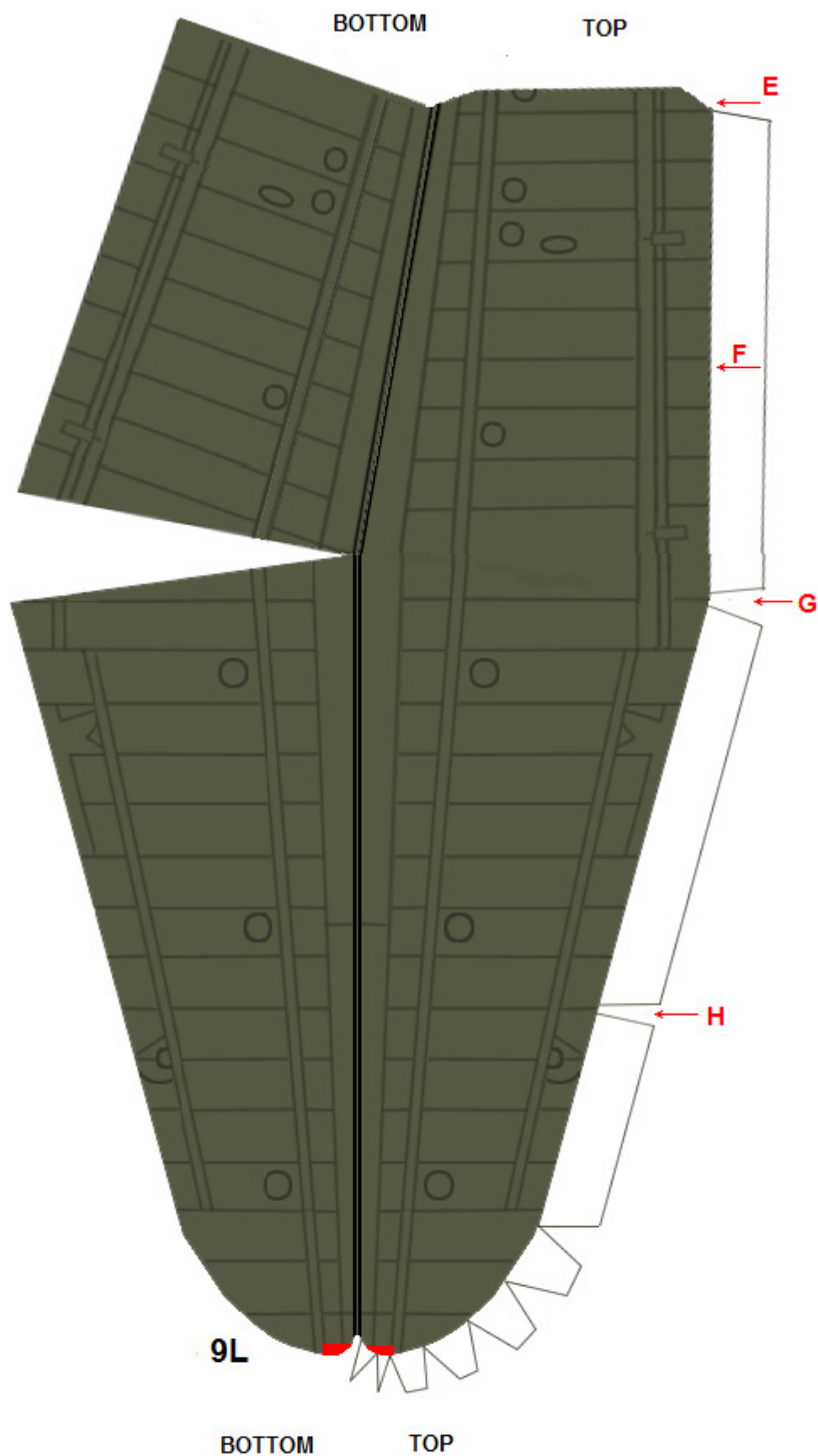
Sheet 5

Lysander

© Bob Schedler 2011

21

22

Nose Cone

Support to Fuselage

Drop Fuel Tank

26

Sheet 6

Lysander

16

17

LEFT

TOP

RIGHT

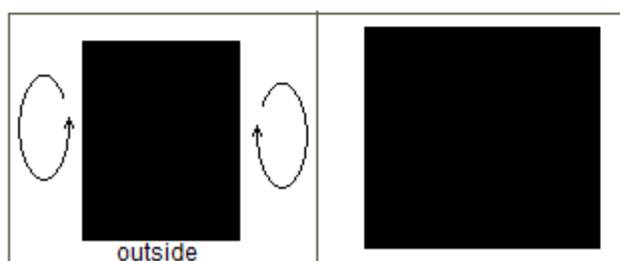Make 3x thick

17B

Sheet 7
Lysander
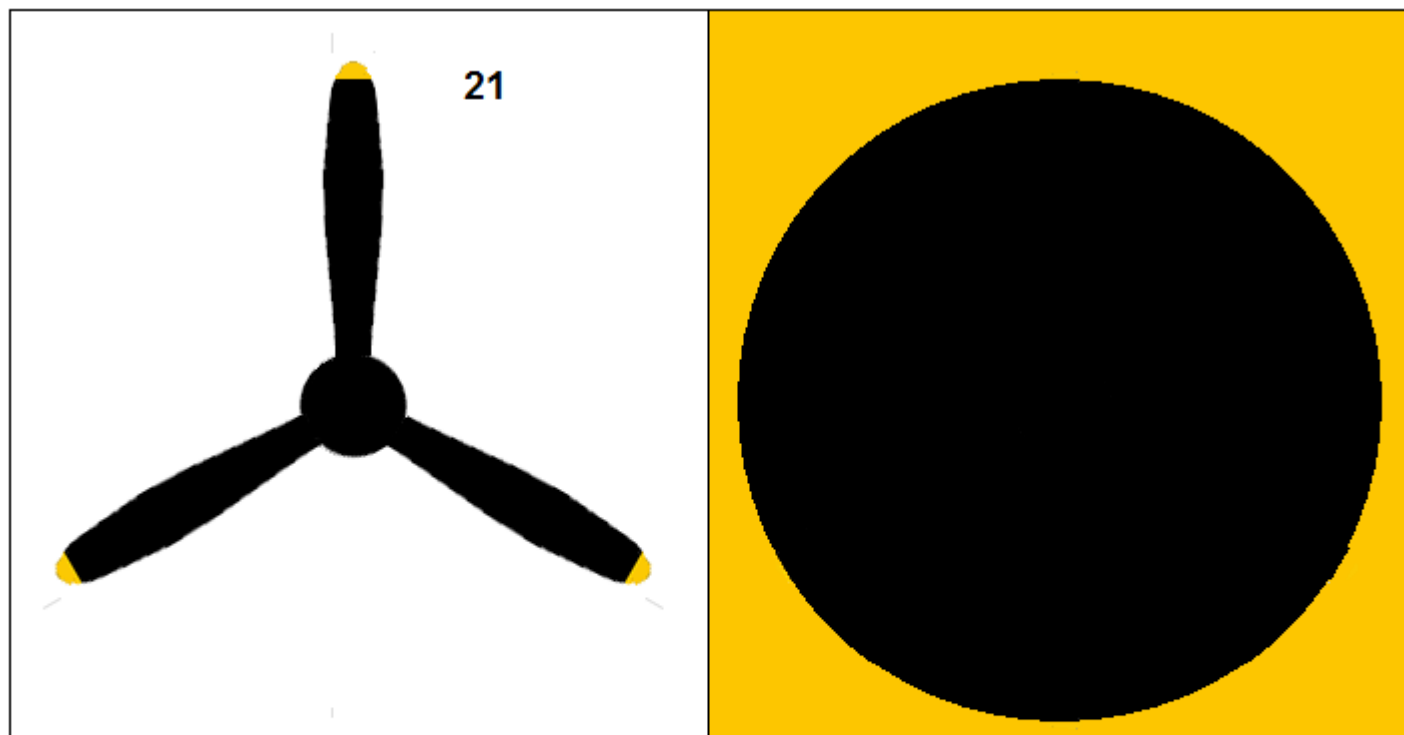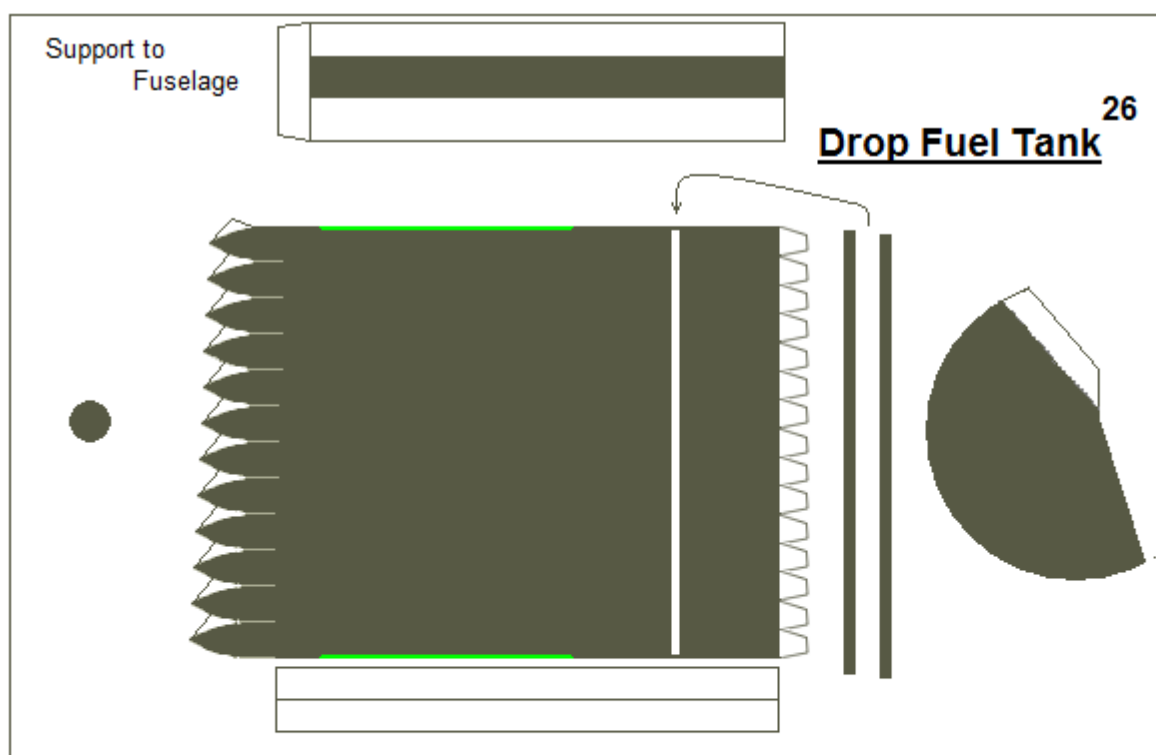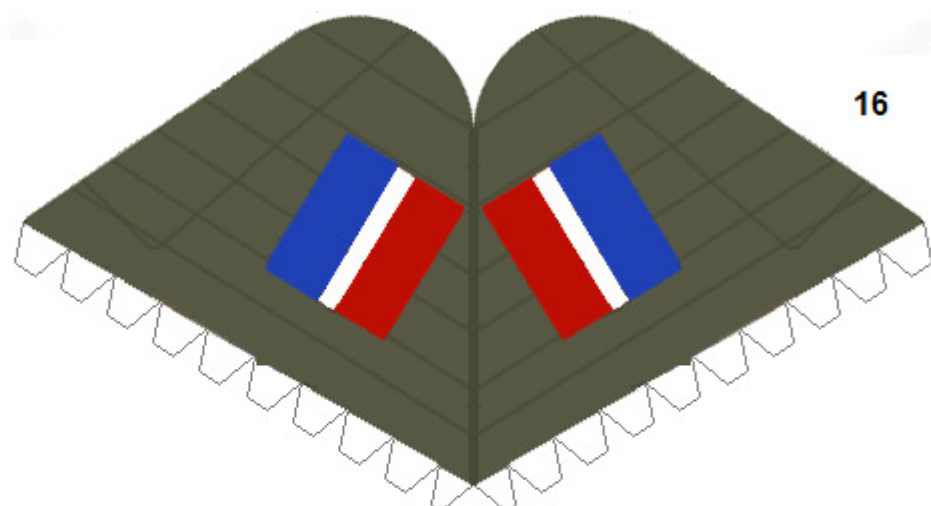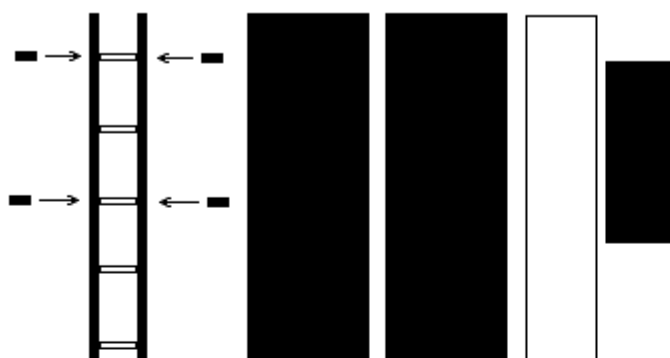
Agent's Ladder ²³

To make ladder, roll parts around
a 0.5-1mm pin, and glue
together.
Diagram above is to scale.

Aerial ²⁴

Roll around the tip of a cocktail stick, &
insert under fuselage with about 1cm
protruding.

outside

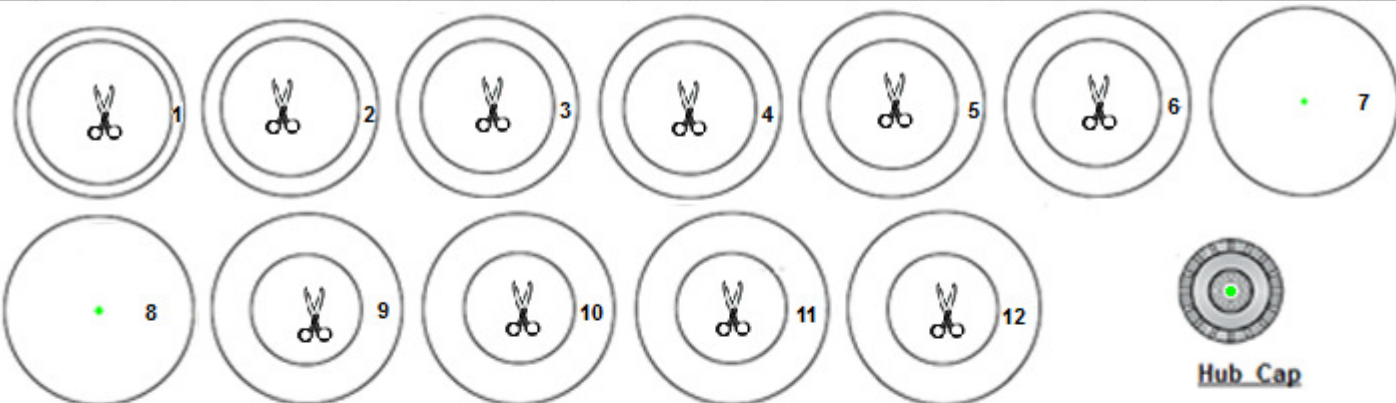## Exhaust ²⁵

Glue and foled, then before glue is dry, cut out, roll/glue around
an approx. 5mm diameter rod, or drill bit.

Flashing

PRINT   ON   PAPER   !!!

Sheet 8
Lysander

Glue around 4-5mm
cocktail sticks.

Lysander Mk III
1 : 36

Bob's Card Models

Sheet 9
Lysander
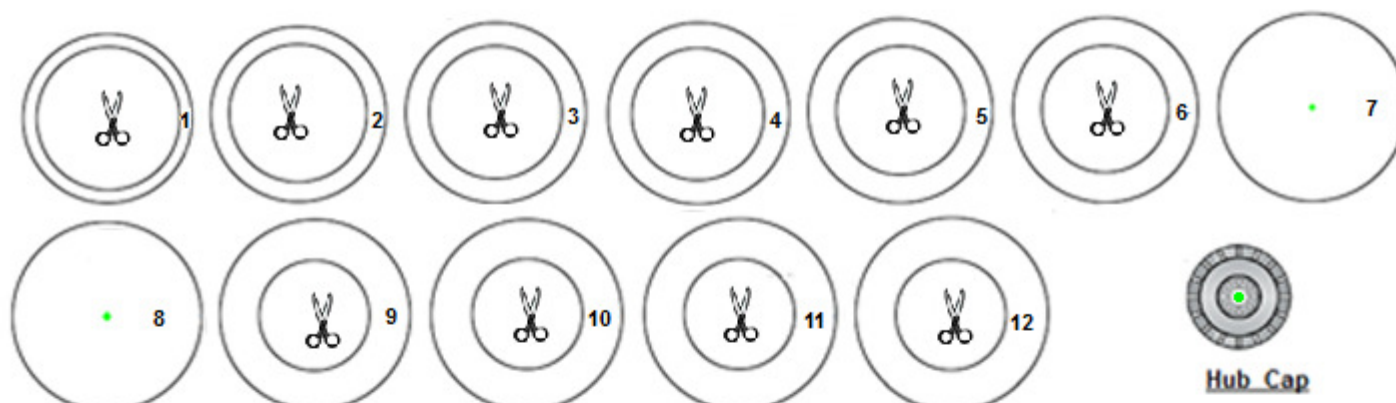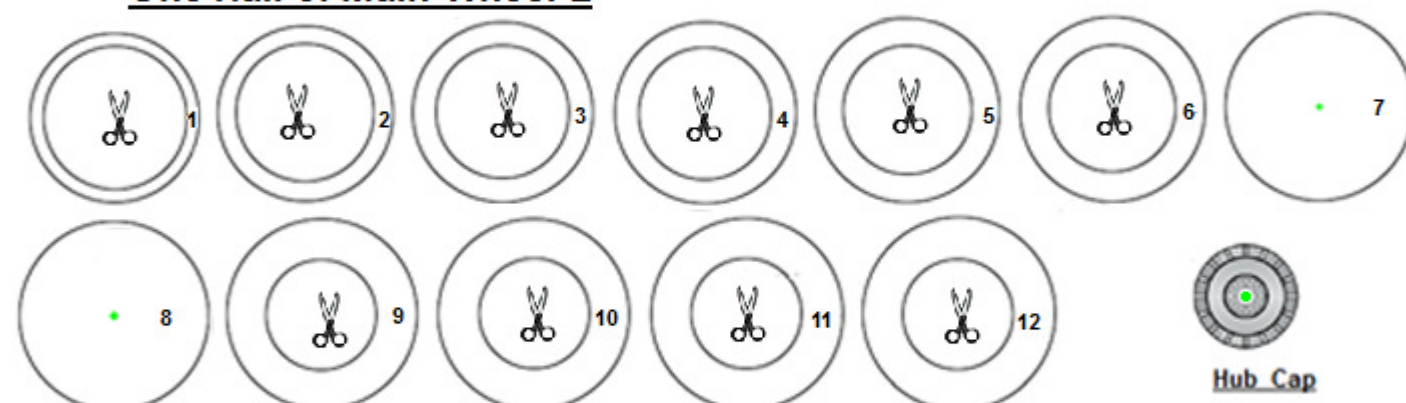
One Half of Main Wheel 1

Hub_Cap
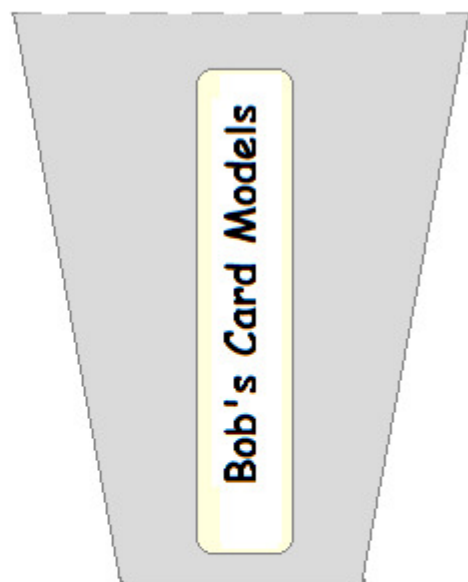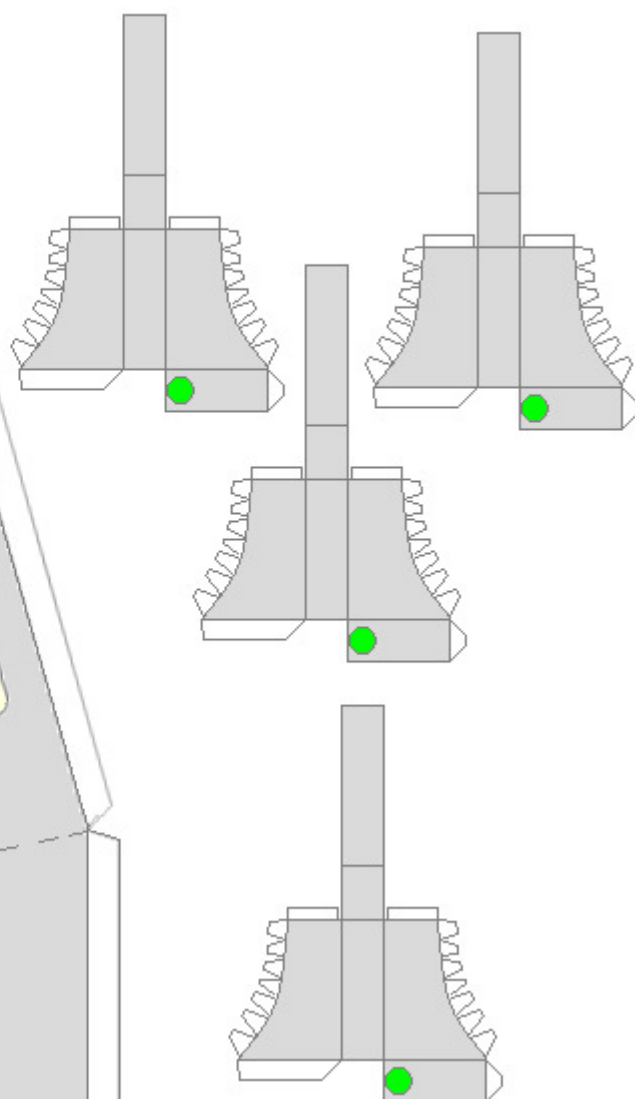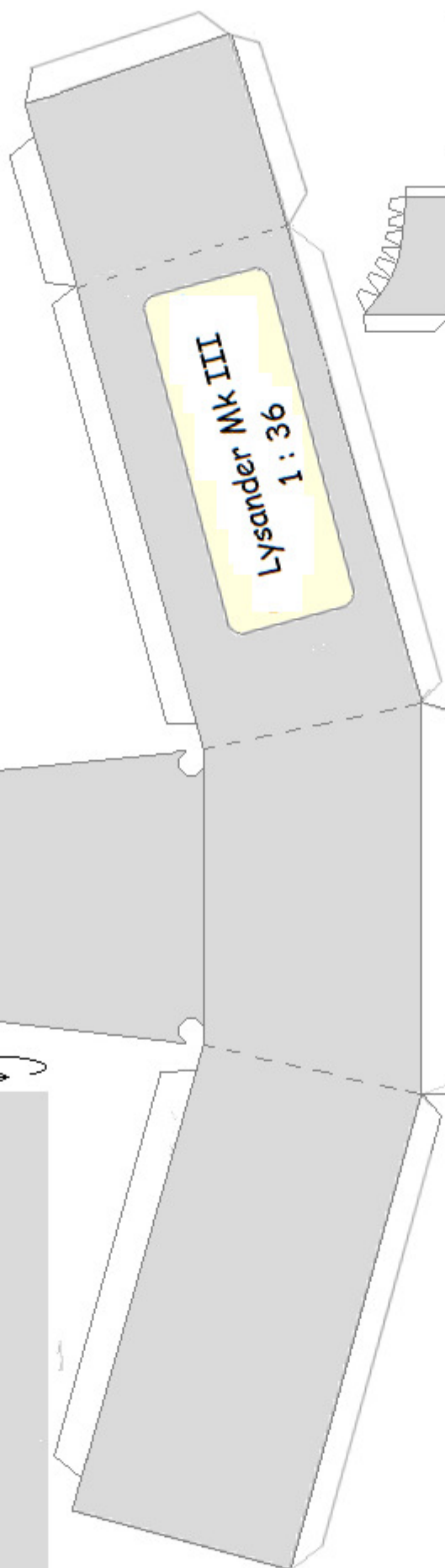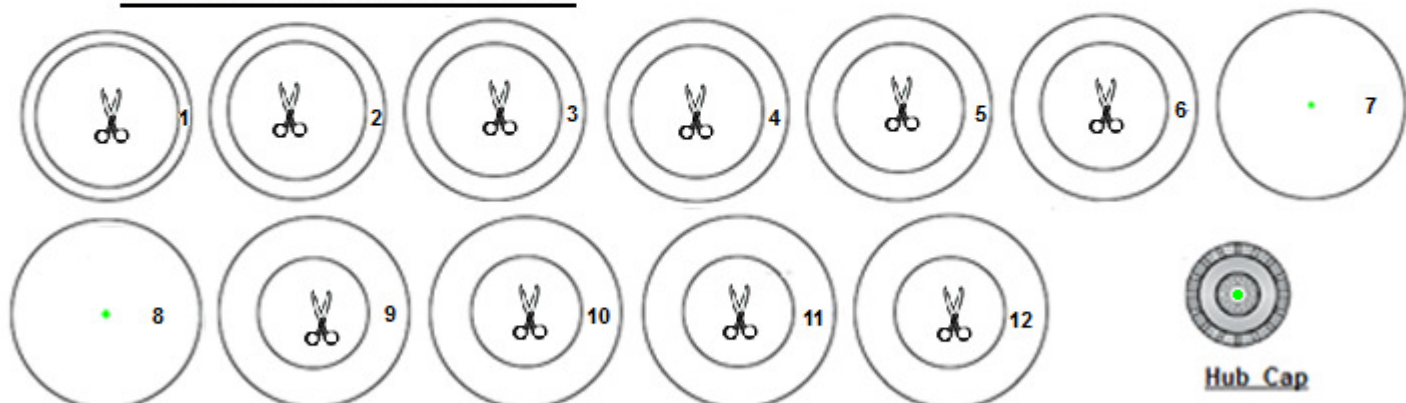
One Half of Main Wheel 1   glue two halves together

One Half of Main Wheel 2

Hub_Cap

One Half of Main Wheel 2   glue two halves together

Hub_Cap

Sheet 10

Lysander

Wheels 20