

Woodworking with machines and also hand tools can be dangerous. Don't start this project without an advanced knowledge about woodworking and (power) tools.

You can make this project with different woodworking machines, but in my opinion you need at least a saw (I prefer a band saw) , a (small) jointer, sanding machine (one type of), a (small) router and a drill press. Also a lathe can be useful.

This pattern has 10 parts. You can start with part 1, but if you like you can also start with another part. You can find the part number in the lower left corner.

The 10 parts are divided in 30 chapters.

Part 1	chapter 1,2,3,4.
Part 2	chapter 5,6,7.
Part 3	chapter 8.
Part 4	chapter 9,10,11,12,13,14.
Part 5	chapter 15,16.
Part 6	chapter 17.
Part 7	chapter 18.
Part 8	chapter 19.
Part 9	chapter 20,21,22,23,24.
Part 10	chapter 25,26,27,28,29,30.

Besides the pattern itself there is also:

1. A PDF with templates.
2. A video of the real wooden prototype.
3. A PDF from tractor breakdown and build (made by Ducky).
4. A video from tractor breakdown and build (made by Ducky).
5. A full 3D drawing in Sketchup (.skp) called "Trekker by Dutchy" (made by Ducky).

You can download a Sketchup viewer (or SketchUp make) for free at:

<https://www.sketchup.com/download/all>

Important:

There are many ways to glue parts together but remember the following.

1. Glue the parts from chapter 1-7 together
2. Glue the parts from chapter 8-9 together and check good running gearbox!
3. Glue the parts from chapter 10-13 together
4. Glue the units from chapter 8-9 and 10-13 together
5. Glue the parts from chapter 15 together
6. Mount front axle from chapter 15 in axle mount from chapter 2

Now you can glue all above units together **and when necessary you can make some size corrections.**

The glue order for further process is less important and up to you.

Use PVAc wood glue and/or super glue (cyanoacrylate)

There are different colors and line types used in the drawing.

1. The building parts are black.
2. Dimensions are red.
3. Holes are purple
4. Numbers are green
5. Viewpoints are (light) blue letters with a circle around the letter.
6. Annotations are green or red.
7. Mounted parts are ("darker") blue
8. Hidden lines are dashed.

Pieces are drawn in scale 1:1. Mostly drawn from three sites (when necessary 4) Dowels are drawn from 2 sides. Mounted parts are **almost all** drawn in 1:2, and sometimes in 1:1

Mostly there is a viewpoint letter in the parts. These viewpoints are:

1. **L** From the left side (of the tractor)
2. **R** From the right side
3. **F** From the front side
4. **B** From the backside
5. **T** from the top side.
6. **U** from the bottom (under) side.

Small dowels of 2mm are toothpicks. You can however also use smaller toothpicks, but be aware to make a corresponding hole.

The whole tractor is a difficult build, especially the steering mechanism. You can consider to build the tractor without this mechanism.

All sizes are in metric. This means that also the holes are in metric. You can however, if you like also use imperial sized drills.

- Use a **3/32"** drill (2,4 mm) where a **2,5** mm hole is drawn.
- Use a **1/8"** drill (3,2 mm) where a **3** mm hole is drawn.
- Use a **5/32"** drill (4 mm) where a **4** mm hole is drawn.
- Use a **3/16"** drill (4,8 mm) where a **5** mm hole is drawn.
- Use a **1/4"** drill (6,4 mm) where a **6** mm hole is drawn.
- Use a **5/16"** drill (7,9 mm) where a **8** mm hole is drawn.
- Use a **3/8"** drill (9,5 mm) where a **10** mm hole is drawn.
- Use a **1/2"** drill (12,7 mm) where a **12** mm hole is drawn.

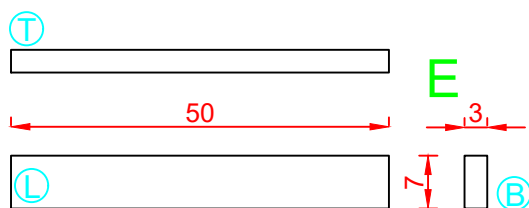
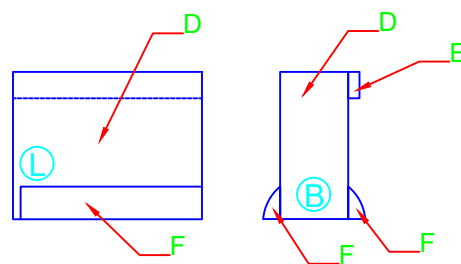
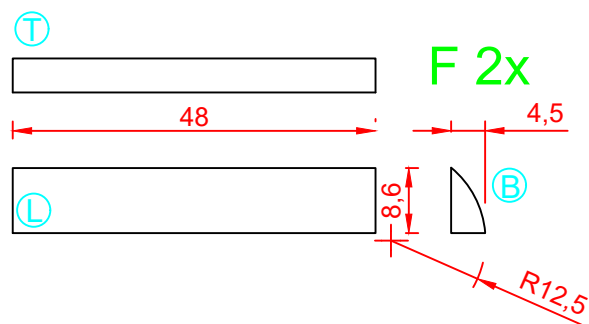
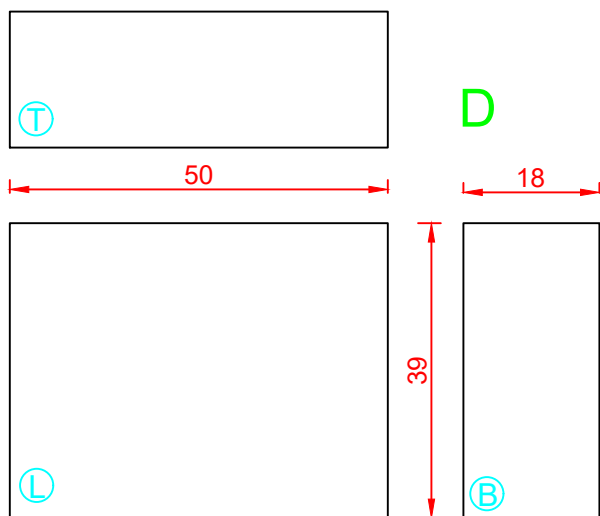
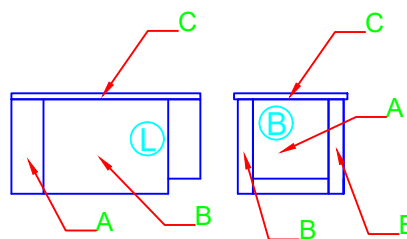
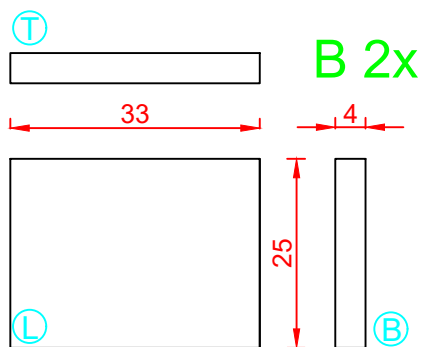
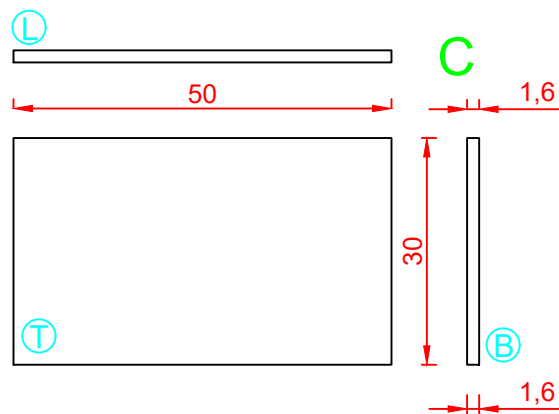
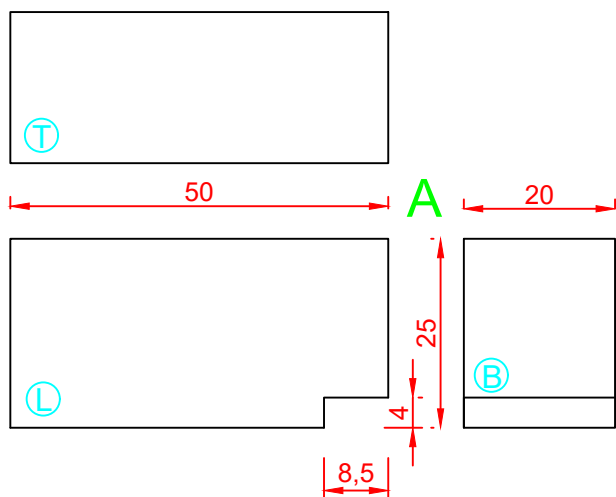
When you see shortcomings please sent us a mail and make it possible to improve the pattern.

Enjoy building.

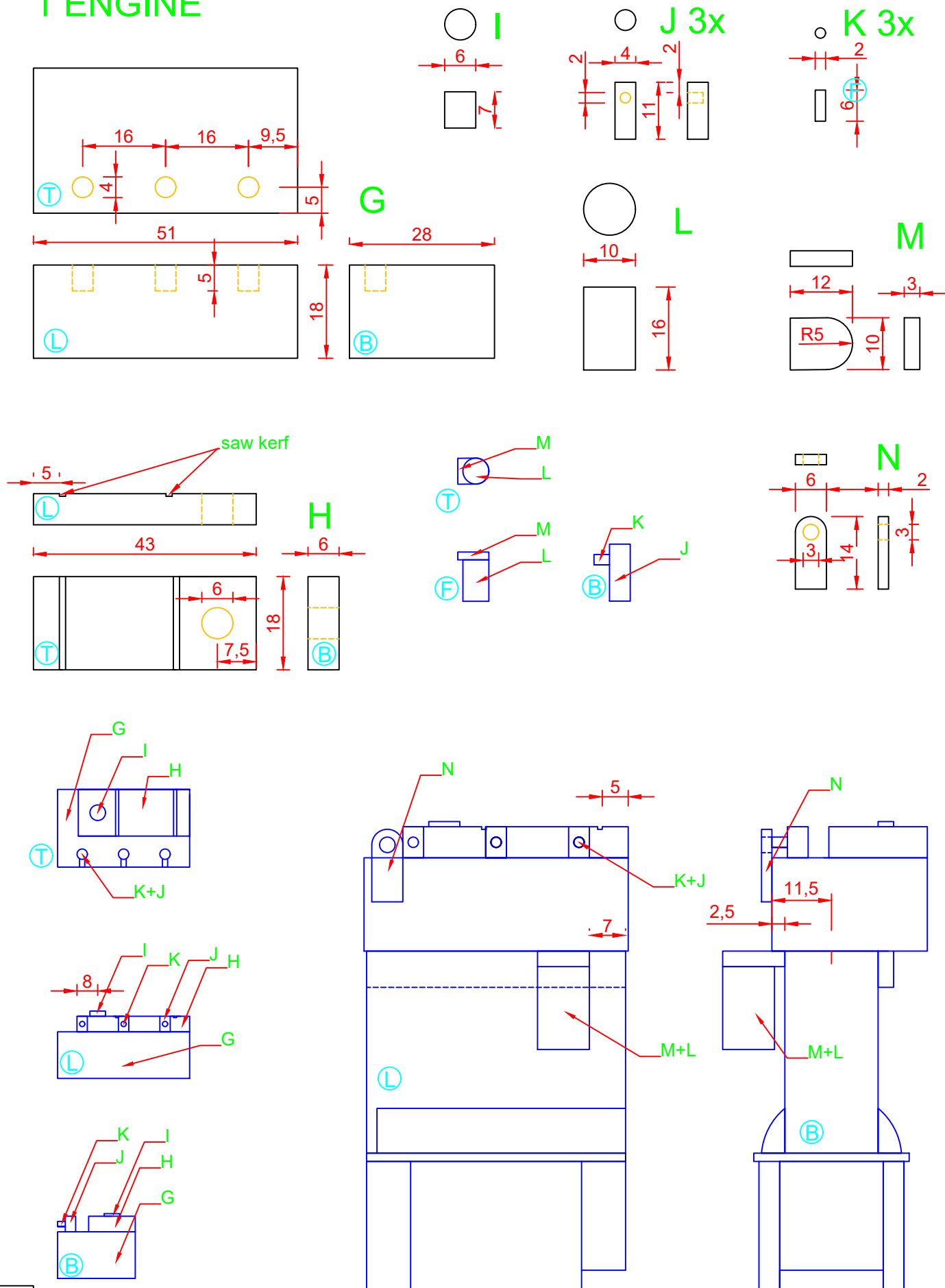
Dutchy

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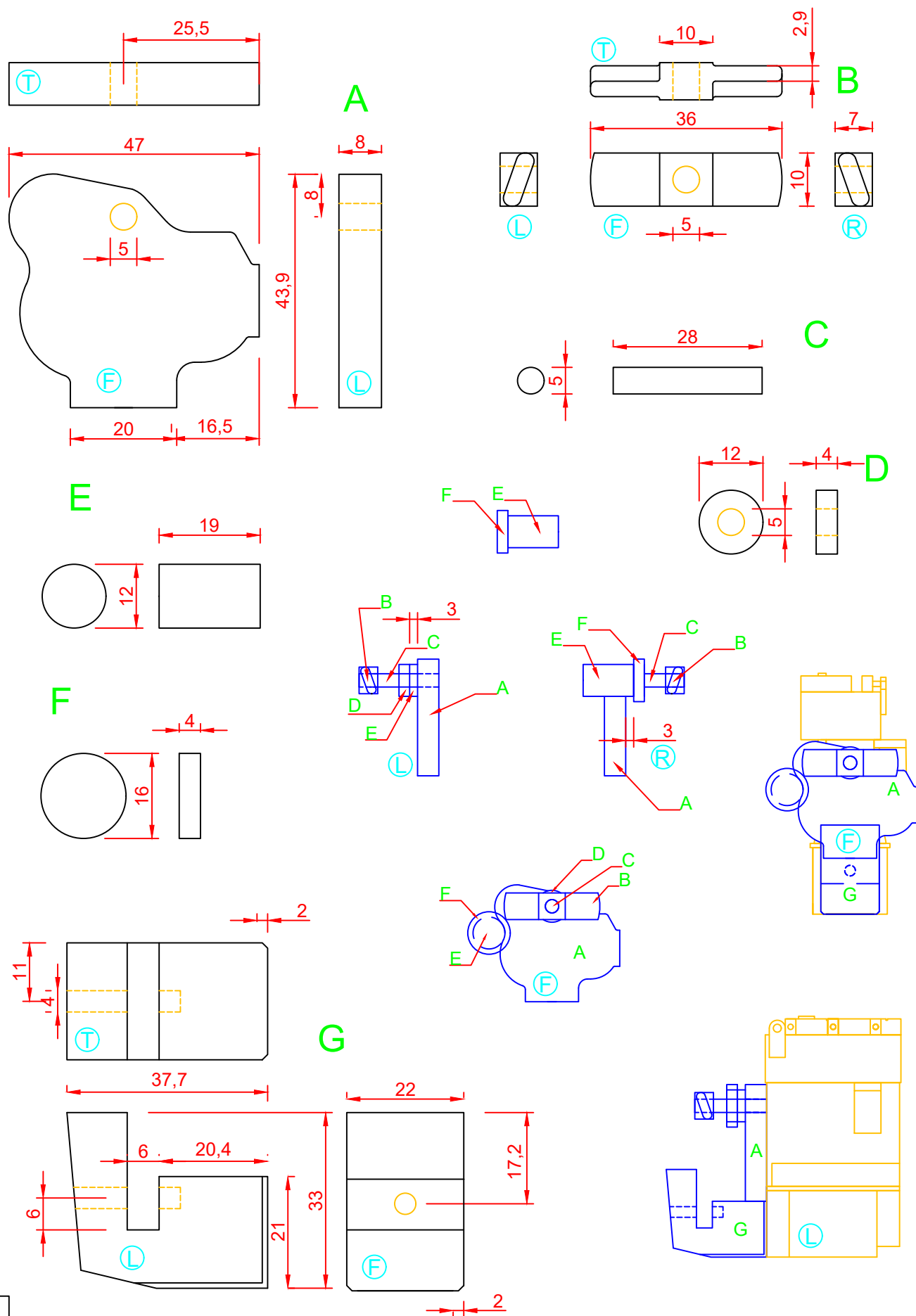
1 ENGINE



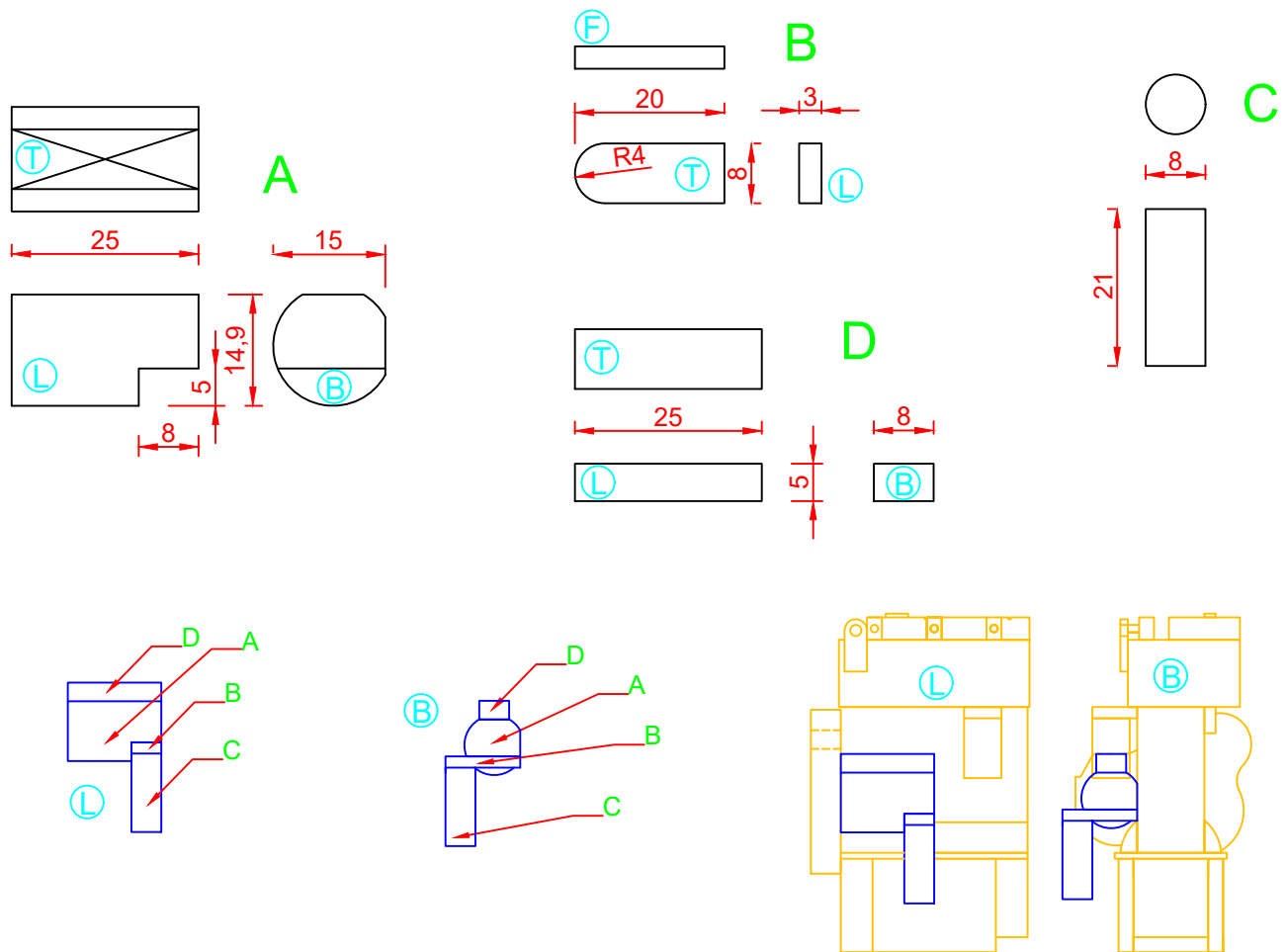
1 ENGINE



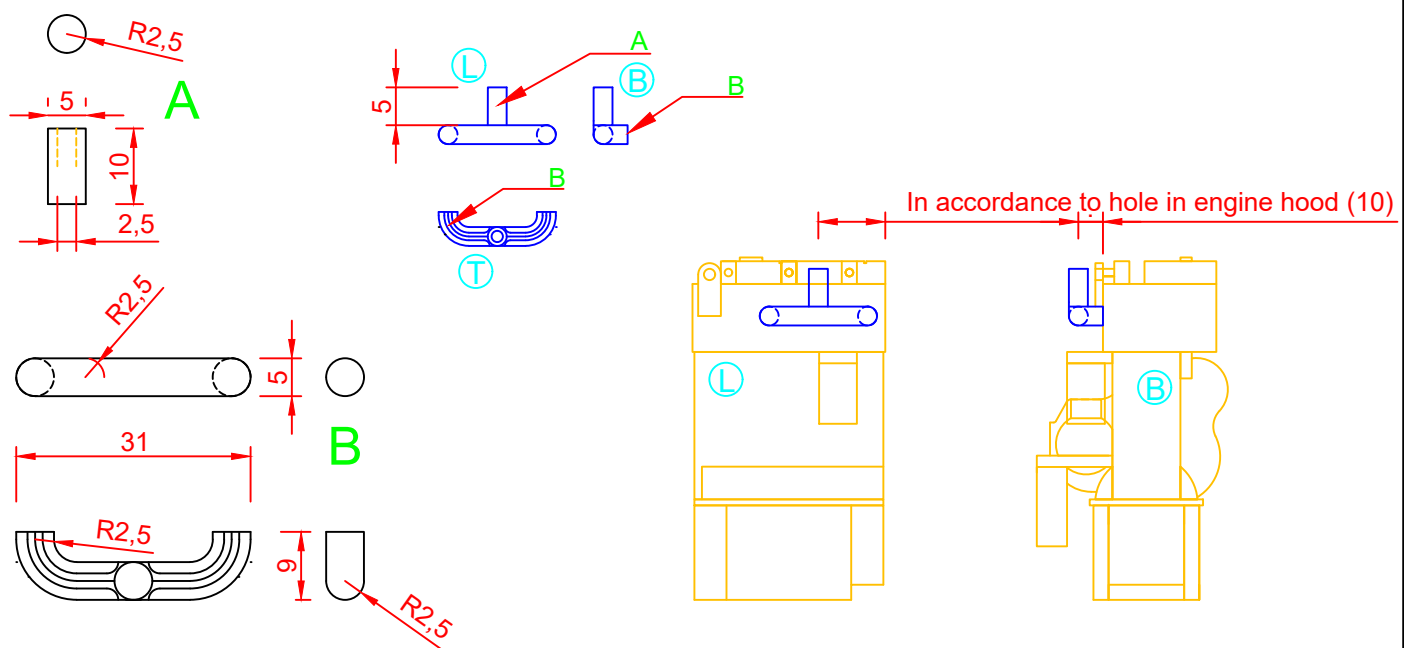
2 TIME GEAR,FAN AND AXLE MOUNT



3 FUELPUMP



4 MANIFOLD

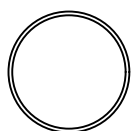


Wait with mounting of manifold !

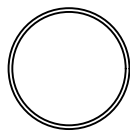
Templates

Explanation of template number

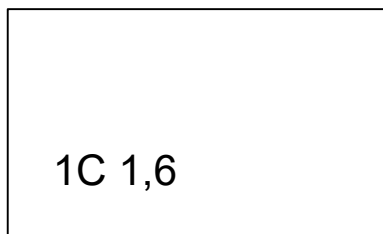
10D 2 10D 2 10D 2
└─ Chapter ─┘ └─ Part number ─┘ └─ Wood thickness ─┘



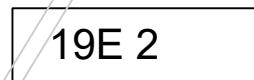
14C 1



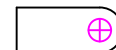
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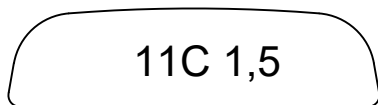
1C 1,6



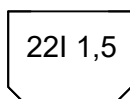
19E 2



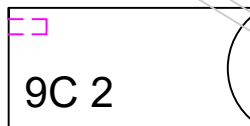
1N 2



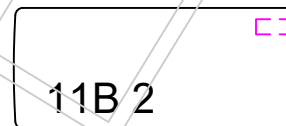
11C 1,5



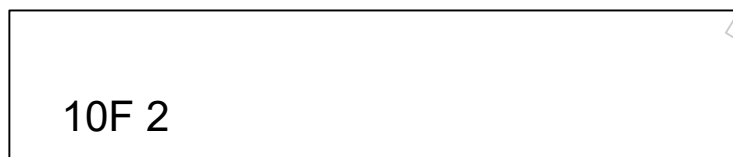
22I 1,5



9C 2



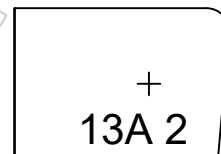
11B 2



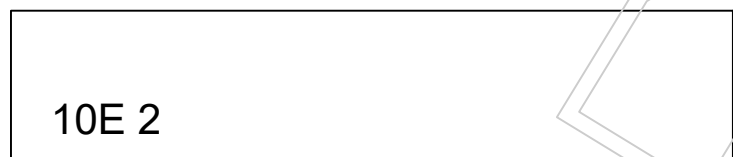
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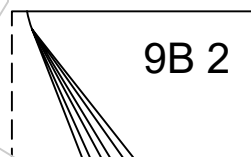
9B 2



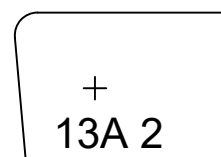
+
13A 2



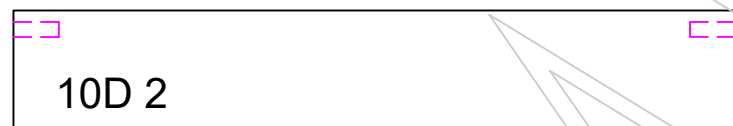
10E 2



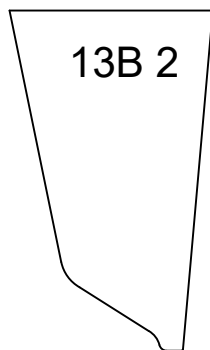
9B 2



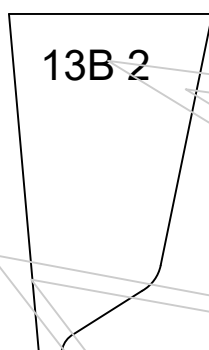
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13A 2



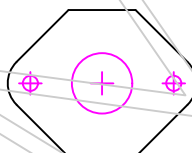
10D 2



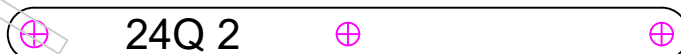
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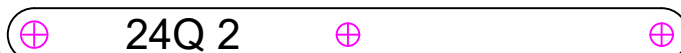
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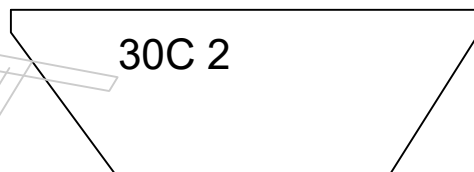
23B 2



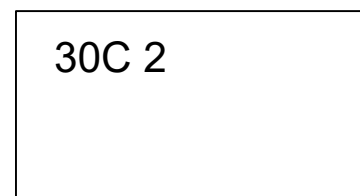
24Q 2



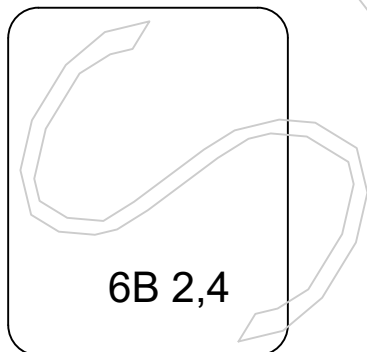
24Q 2



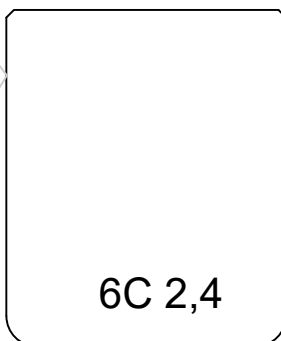
30C 2



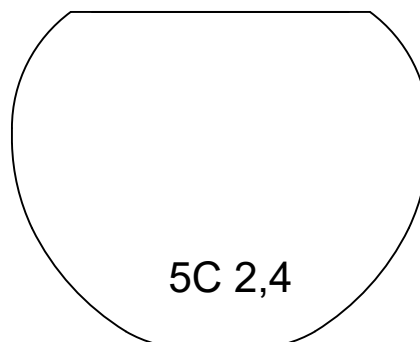
30C 2



6B 2,4



6C 2,4



5C 2,4