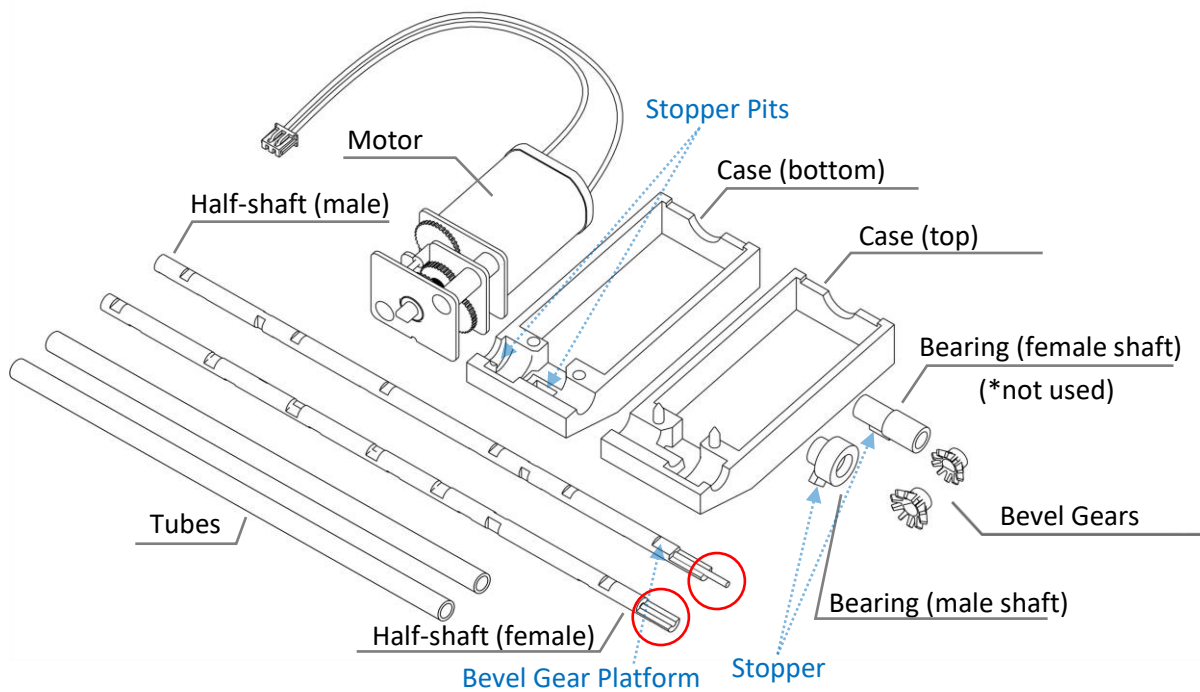


ELEMENT ASSEMBLY

« ANGLE GEAR BOX » – WHEELED VEHICLE

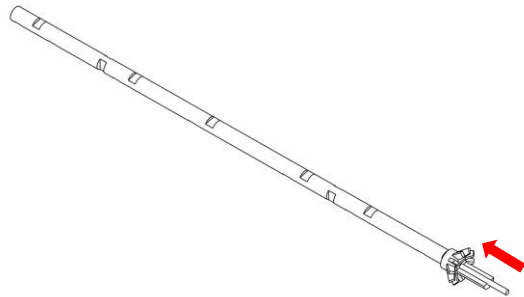


Element « Angle Gear Box » for Wheeled Vehicle includes:

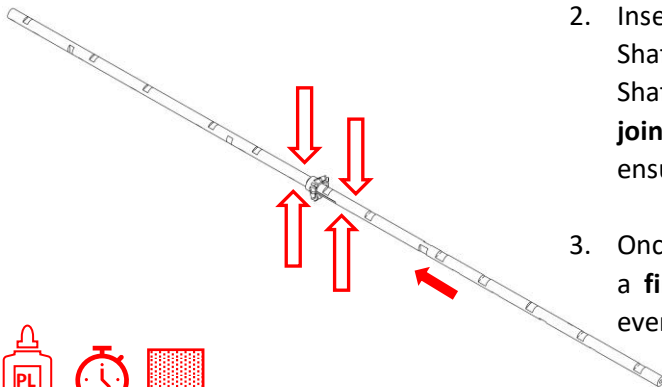
- 1 x Motor
- 1 x Motor Case: Bottom Half (female) with 2 pits for Stoppers / Top Half (male)
- 1 x Half-Shaft (female): a half thickness end, empty
- 1 x Half-Shaft (male): a half thickness end, steel rod sticking out, Bevel Gear platform
- 1 x Bearing with stopper for female Half-Shaft (*not used in Wheeled Vehicle configuration)
- 1 x Bearing with stopper for male Half-Shaft
- 2 x Bevel Gear
- 2 x Reinforcement Tube

 **Important**

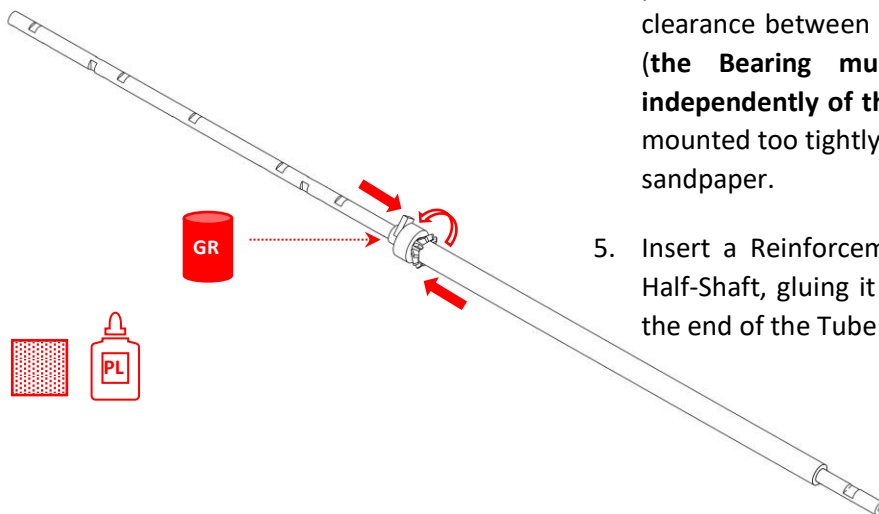
Depending on the type of model, the Reinforcement Tubes can be cut and placed directly on the model and not on the Shafts during the assembly of Angle Gear Box. In this case, the Shaft will be inserted and glued later into the Reinforcement Tubes, while you build the model.



1. Insert the steel rod end of the male Shaft into a Bevel Gear. Push the Bevel Gear until it reaches the end of the platform (Make sure to match "D" shape of Bevel Gear hole to that of the shaft).



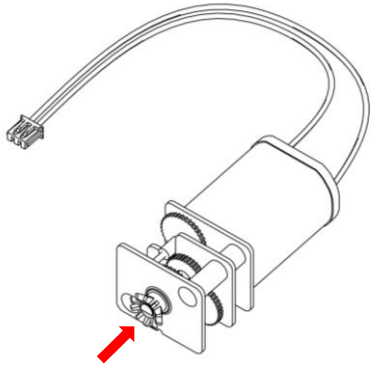
2. Insert the steel rod sticking out into the female Shaft, fitting the half-thickness of two Half-Shafts. **Glue** (plastic cement) **and hold the joint pressed** (leave it pressed overnight to ensure a good hold).
3. Once the glue is fully dry, smooth the joint with a **fine sandpaper** to obtain a seamless and even Shaft.



4. Put the Bearing for the male Half-Shaft in position as shown in the illustration. Check the clearance between the Bearing and the Shaft (**the Bearing must be able to rotate independently of the Shaft**). If the Bearing is mounted too tightly on the Shaft, rework with sandpaper.
5. Insert a Reinforcement Tube on the female Half-Shaft, gluing it well onto the shaft. Push the end of the Tube into the Bevel Gear.

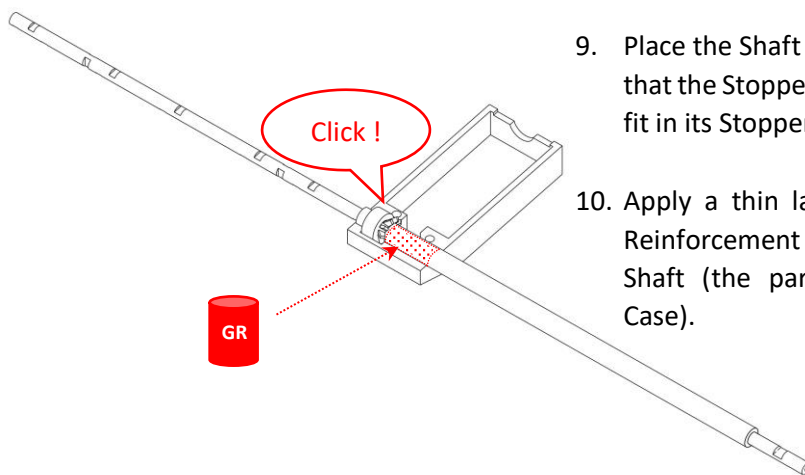
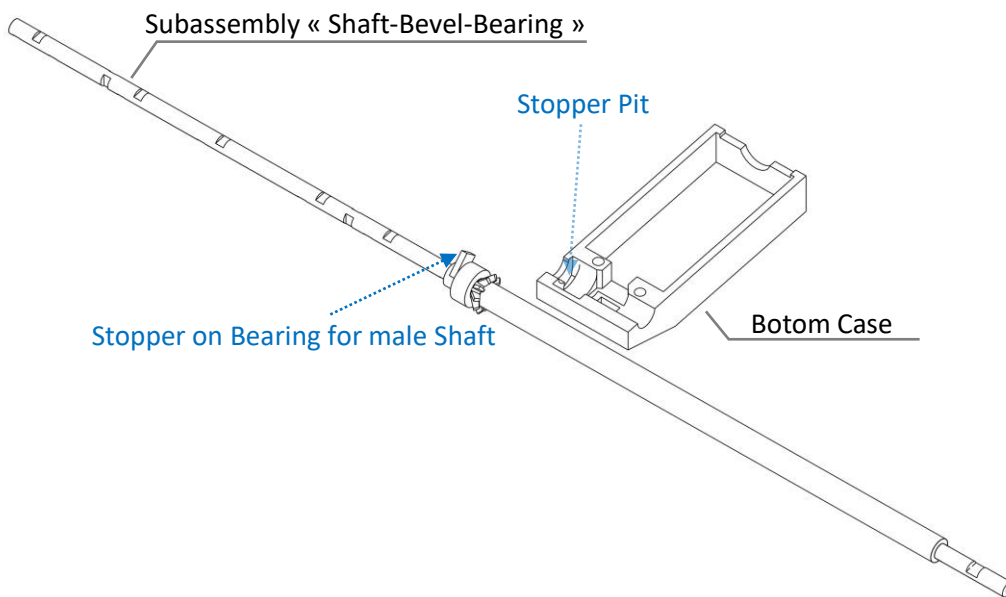


6. Apply a small amount of **neutral grease** between the male Half-Shaft and the Bearing + the Bevel Gear to lubricate the movement.



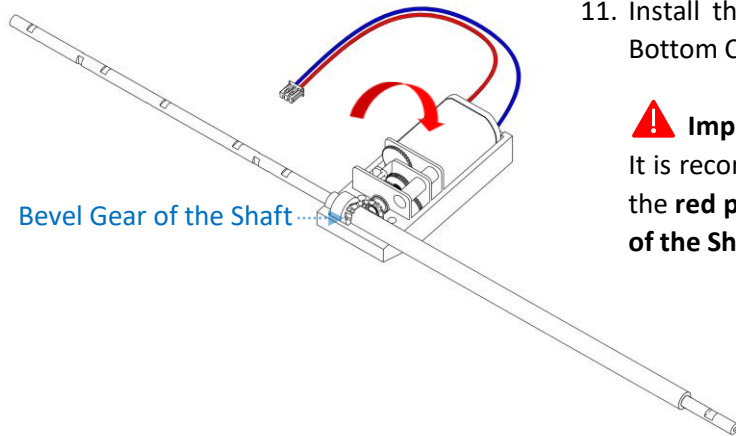
7. Mount the other Bevel Gear on the Motor shaft (Be aware of the “D” shape of both parts).

8. Gather the subassembly “Shaft-Bevel-Bearing” and Bottom Motor Case.



9. Place the Shaft in the Bottom Case. Make sure that the Stopper on Bearing for male Half-Shaft fit in its Stopper.

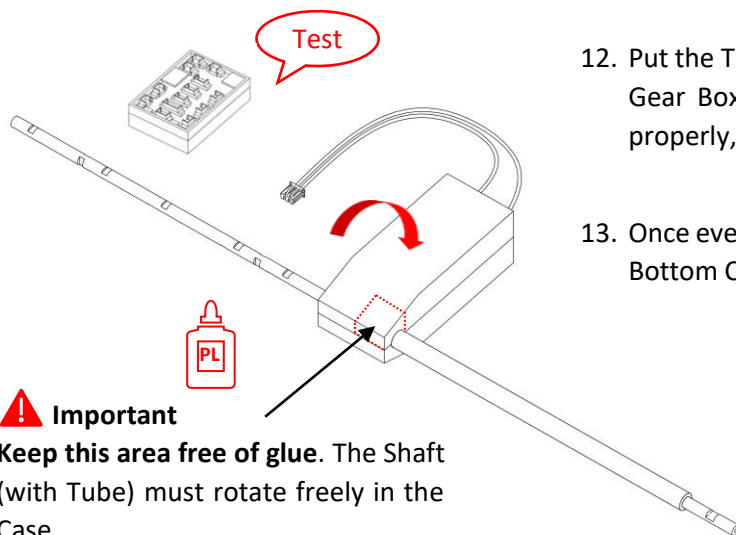
10. Apply a thin layer of **neutral grease** to the Reinforcement Tube glued to the female Half-Shaft (the part coming inside the Bottom Case).



11. Install the Motor with its Bevel Gear in the Bottom Case.

⚠ Important

It is recommended to place the Motor so that the **red power cable is on the Bevel Gear side of the Shaft.**

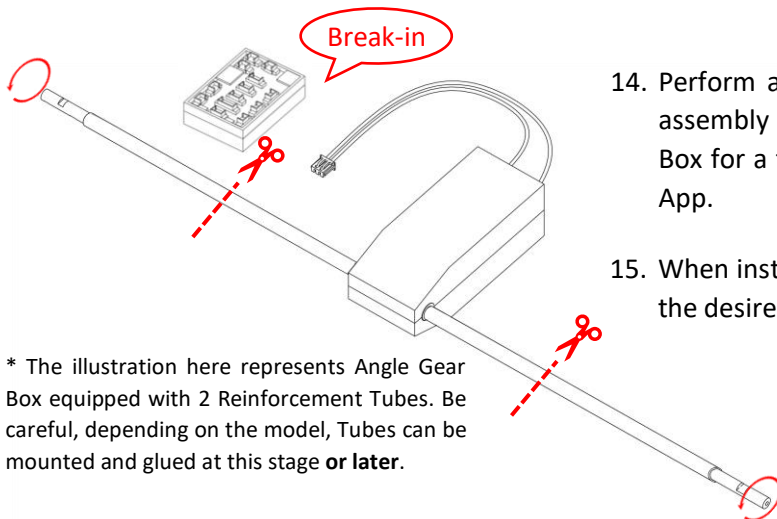


12. Put the Top Case in its position. Connect Angle Gear Box to Module and test if it's working properly, using the App.

13. Once everything is ok, glue the Top Case to the Bottom Case (plastic cement).

⚠ Important

Keep this area free of glue. The Shaft (with Tube) must rotate freely in the Case.



14. Perform a « break-in » before mounting the assembly on the model: run in the Angle Gear Box for a few minutes at full speed, using the App.

15. When installing on the model, cut the Shaft to the desired length.

* The illustration here represents Angle Gear Box equipped with 2 Reinforcement Tubes. Be careful, depending on the model, Tubes can be mounted and glued at this stage **or later**.

The rotation direction of each Motor can be changed via the App.