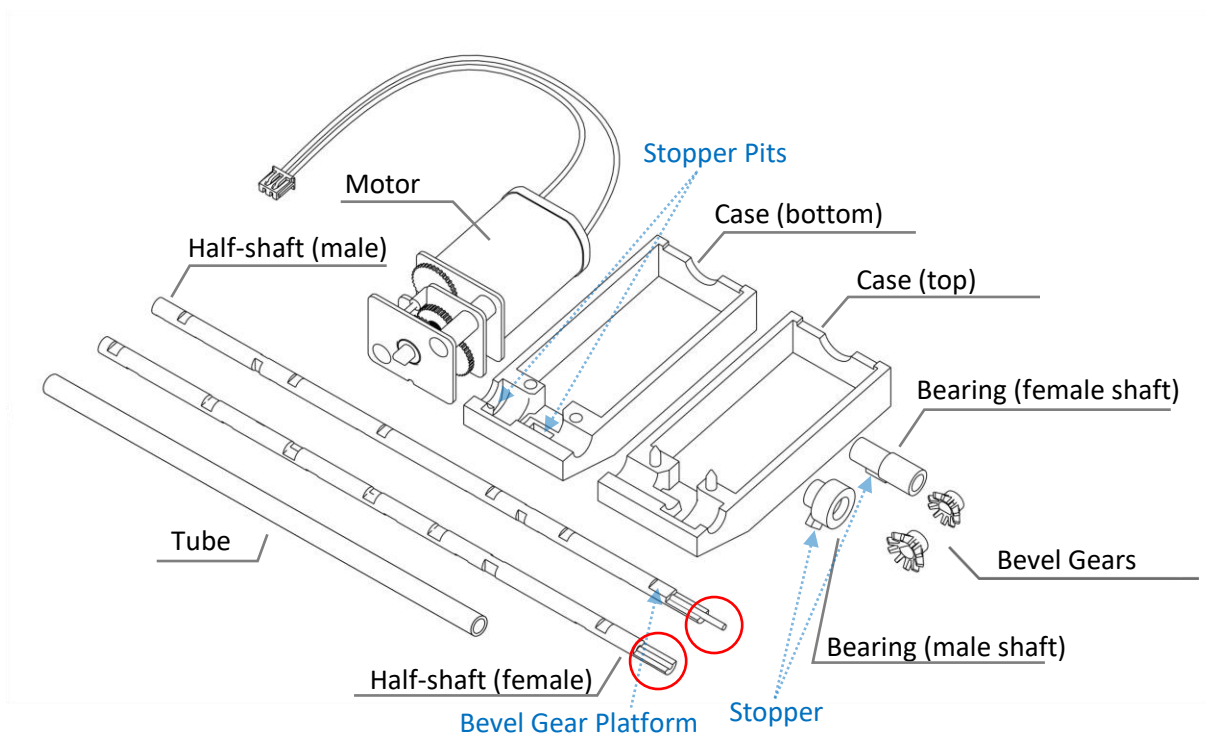


ELEMENT ASSEMBLY

« ANGLE GEAR BOX » – TRACKED VEHICLE

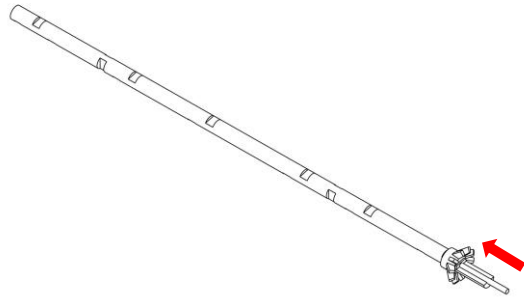


Element « Angle Gear Box » for Tracked Vehicle includes:

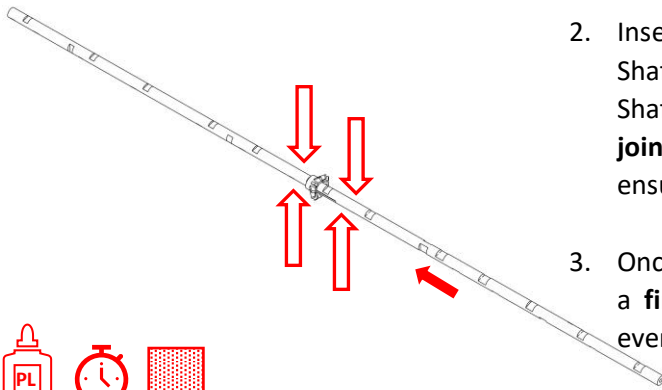
- 1 x Motor
- 1 x Motor Case: Bottom Half (female) with 2 pits for Stoppers / Top Half (male)
- 1 x Half-Shaft (female): a half thickness end, empty
- 1 x Half-Shaft (male): a half thickness end, steel rod sticking out, Bevel Gear platform
- 1 x Bearing with stopper for female Half-Shaft
- 1 x Bearing with stopper for male Half-Shaft
- 2 x Bevel Gear
- 1 x Reinforcement Tube

 **Important**

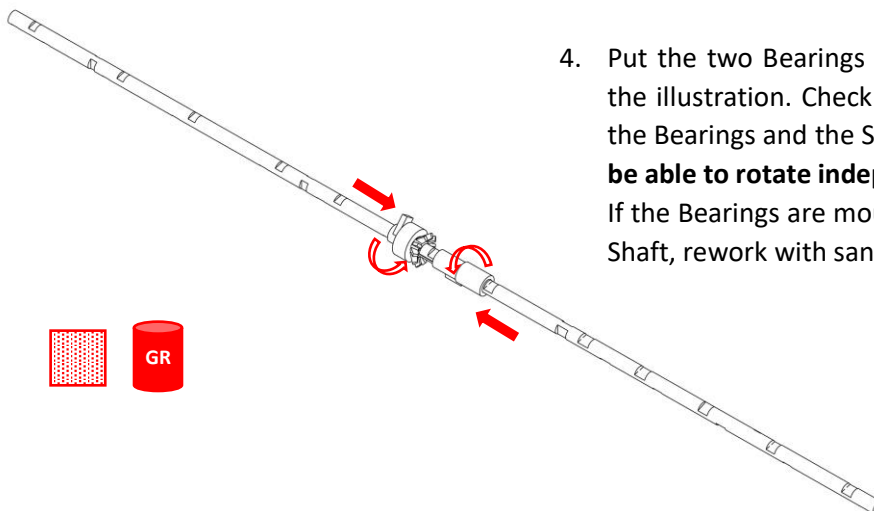
Depending on the type of model, the Reinforcement Tube can be cut and placed directly on the model and not on the Shafts during the assembly of Angle Gear Box. In this case, the Shaft will be inserted and glued later into the Reinforcement Tube, while you build the model.



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).



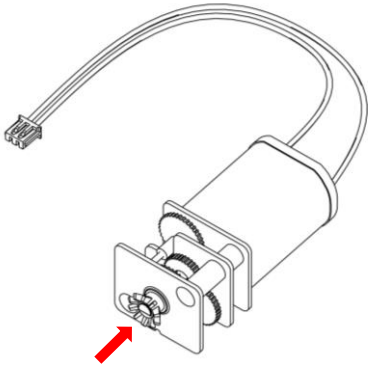
2. Insert the steel rod sticking out into the female Shaft, fitting the half-thickness of two Half-Shafts. **Glue** (plastic cement) **and hold the joint pressed** (leave it pressed overnight to ensure a good hold).
3. Once the glue is fully dry, smooth the joint with a **fine sandpaper** to obtain a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



4. Put the two Bearings in position as shown in the illustration. Check the clearance between the Bearings and the Shaft (**the Bearings must be able to rotate independently of the Shaft**). If the Bearings are mounted too tightly on the Shaft, rework with sandpaper.

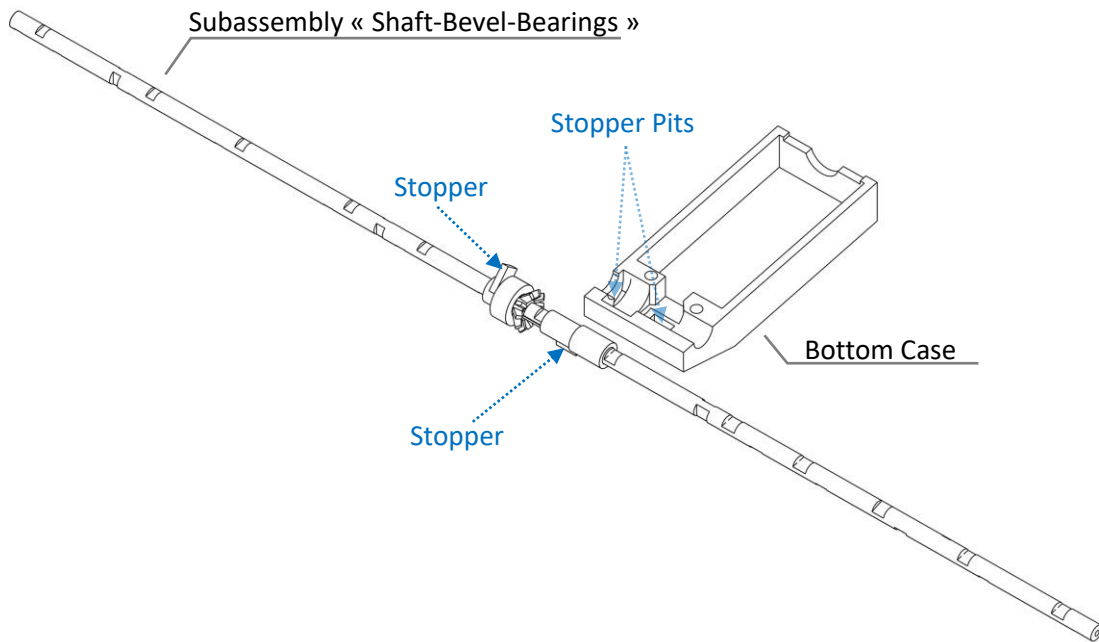


5. Apply a small amount of **neutral grease** to lubricate the movement of the Bearings on the Shaft and the Bevel Gear.

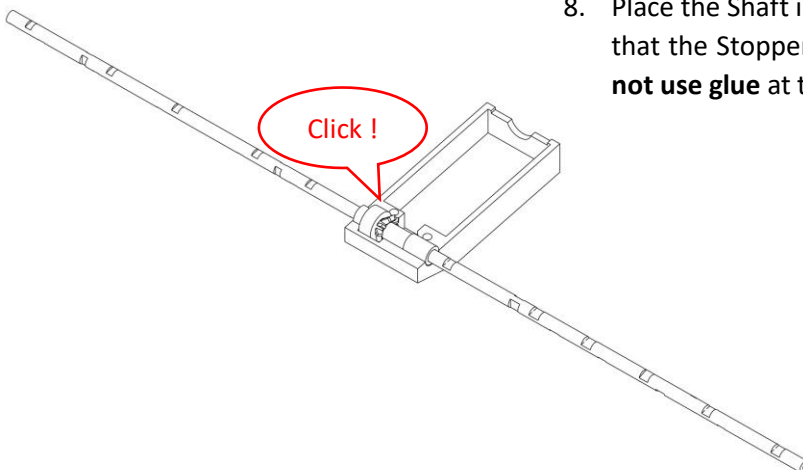


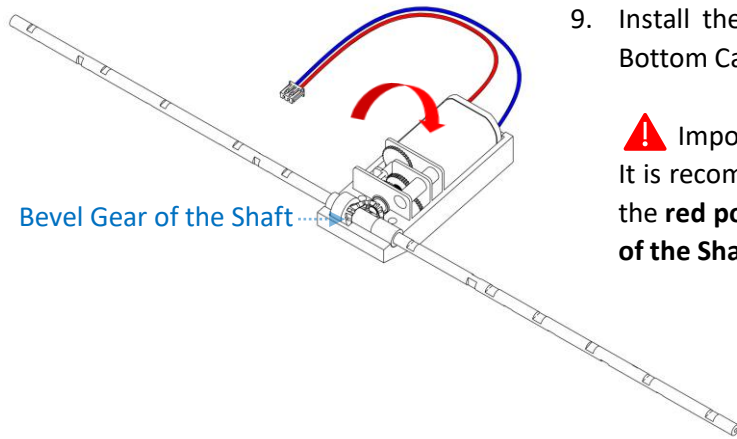
7. Mount the other Bevel Gear on the Motor shaft (Be aware of the “D” shape of both parts).

6. Gather the subassembly “Shaft-Bevel-Bearings” and Bottom Motor Case.



8. Place the Shaft in the Bottom Case. Make sure that the Stoppers fit in the Stopper Pits – **Do not use glue** at this stage.

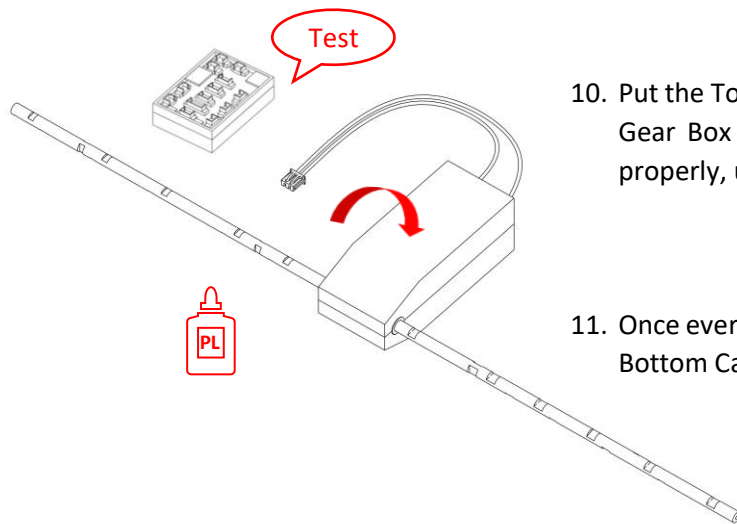




9. Install the Motor with its Bevel Gear in the Bottom Case.

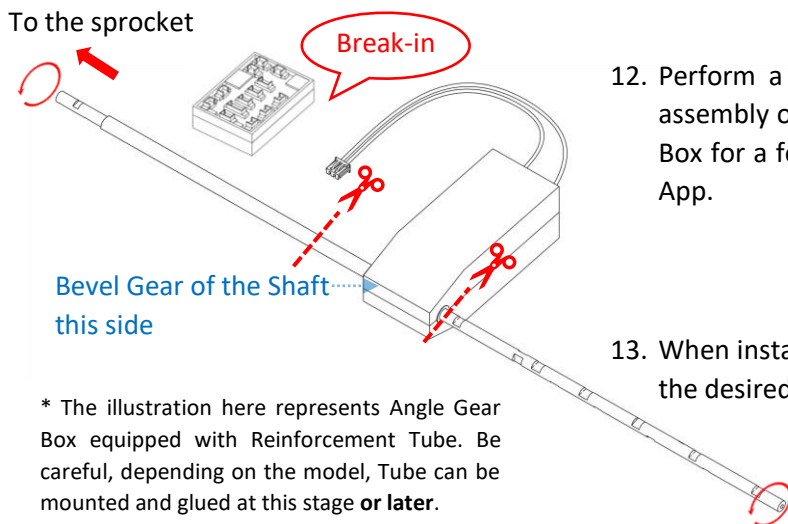
! Important

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



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

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



12. 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.

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

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

! Important

The Bevel Gear side of the Shaft is more resistant to torsion than the other side. It is therefore strongly recommended to attach this side to the driving element (sprocket) of your model in the case of a tracked vehicle. The rotation direction of each Motor can be changed via the App.