Gori® propeller

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INSTALLATION INSTRUCTIONS 3-Blade Folding Propeller

Please read these instructions thoroughly before you start working with the propeller.

The propeller consists of the following parts:

1)	Jacket
2)	Cone Part
3)	Nut
4)	Allen screws (3 pcs.) for locking the nut
5)	Lock bolts for jacket (3 pcs.)
6)	Blade housing
7)	Zinc anode
8)	Fixing bolt for zinc anode
9)	Threaded pin (not for 15" and $16\frac{1}{2}$ " propellers)
10)	Fixing bolt for pins (not for $15"$ and $16\frac{1}{2}"$ propellers)
11)	Pins (3 pcs.)
11.1)	External locking bolts for pins (not for 15" and $16\frac{1}{2}$ " propellers)
12)	Propeller blades (3 pcs.)
13)	Gear-wheel
14)	Spacer
15)	Flexible stops (3 pcs.)
16)	C-spanner
17)	Puller
18)	Allen key 4 mm
19)	Allen key 5 mm
20)	Allen key 6 mm
21)	Loctite

Fitting the propeller

Take 1-5 apart. Use the C-spanner (16) for turning off the jacket of the blade housing. Do not forget to turn the jacket clockwise.

Remember that the blade housing and the blades (6-7-8-9-10-11-12-13-14-15) should not be taken apart as they have been assembled and the bolts have been locked with Loctite (21).

Push the jacket (1) on to the shaft and then the cone part (2).

Check that the cone part (2) fits the cone, and ensure proper seating without key interference. Adjust the key if necessary.

Fit and tighten the nut (3) very tight.

Turn the jacket so that it is possible to put the allen screws (4) through the holes in the jacket.

Fit the allen screws and tighten them with the 4 mm Allen key (18) to lock the nut (4). Smear the allen screws (4) with the Loctite (21) enclosed.

Push the blade housing including the blades (6-7-8-9-10-11-12-13-14-15) on to the cone part(2) so that the 3 legs of the fork engage.

Push the jacket (1) carefully on to the cone part until the thread of the jacket (1) and the blade housing (6) are opposite each other and turn the jacket (1) anticlockwise with the C-spanner (16) until the 3 holes of the jacket (1) are opposite the 3 threaded holes of the cone part (2).

Fit and tighten the lock bolts for the jacket (5) with the 5 mm Allen key (19). Smear the lock bolts (5) with Loctite (21) to secure them.

Check that the propeller blades move freely from closed to open position.

Do not forget to protect the propeller with a zinc anode on the shaft.

Removing the propeller

Remove the lock bolts for jacket (5) with the 5 mm Allen key (19).

Turn the jacket (1) clockwise, looking from behind the boat, with the C-spanner (16) until it is clear of the blade housing (6) and push it on to the shaft.

Remove the blade housing and the blades (6-7-8-9-10-11-11.1-12-13-14-15) from the cone part (2).

Unscrew the Allen screws (4).

Unscrew the nut (3).

Screw the puller (17) into the cone part (2) by turning clockwise.

Turn the bolt in the puller (17) clockwise until the cone part (2) frees from the shaft.

Dismantling of blades and gear-wheel from the blade housing

This must only be done in case of cleaning and servicing.

Remove the fixing bolt (8) and the zinc anode (7) with the 5 mm Allen key (19).

Remove the threaded pin (9) with the 6 mm Allen key (20).

Remove the lock bolt (10) with the 5 mm Allen key (19).

Dismantle the blade pins and the blades with the 6 mm Allen key (20).

Remove the gear-wheel (13).

Remove the spacer (14).

Remove the flexible stops (15) with a pair of pliers or similar.

When remounting the parts it is important to smear the fixing bolt for zinc anode (8), the threaded pin (9), the lock bolt for pins (10) and the pins (11) with Loctite (21) to secure them.

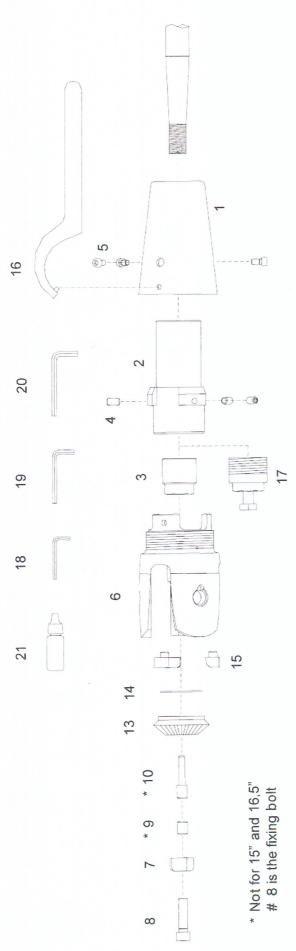
The blade housing (6), the pins (11) and the propeller blades (12) are numbered, and besides the blade housing (6) and the pins (11) are marked with a line, and everything must agree with each when remounting the parts.

REMEMBER

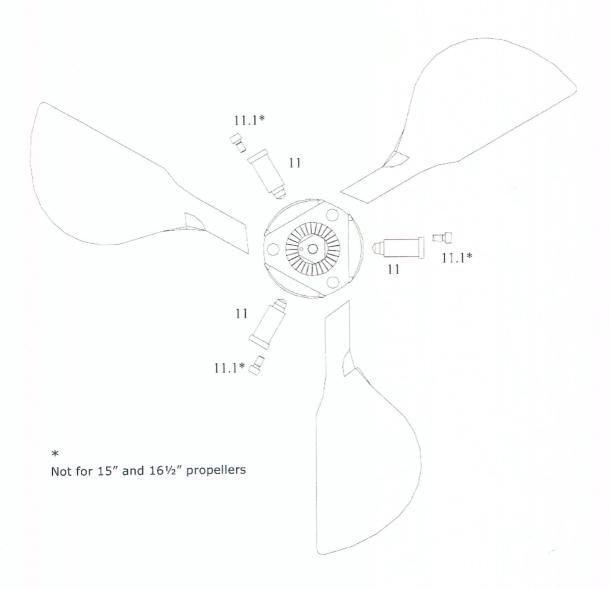
- If more than 50% of the zinc anode (7) has eroded, it should be replaced. The zinc anode is an additional protection. A shaft anode must always be fitted.
- If the gear-wheel (13) has been damaged or worn, it should be replaced.
- If the flexible stops (15) have been damaged or worn, they must be replaced.

WARNING!

- Do not start the engine when the boat is out of the water.
- The propeller has sharp edges. Be careful not to cut your fingers!
- Make sure that the propeller blades do not suddenly open or close and trap your fingers for example.
- Do not turn the propeller/engine shaft until the boat is in the water.
- Stop the engine before diving or swimming in the vicinity of the boat.
- The propeller blades are like knives and can cause considerable damage when rotating. Be careful!
- Do not attempt to remove fishing net or ropes from the propeller when the engine is in motion.
- Check that the propeller works in both forward and reverse before starting each trip.
- If any strange sounds or vibration are noticed coming from the propeller, stop the engine immediately and solve the problem.
- In case of problems in connection with the mounting, use or function of the propeller, contact Gori Propeller or the importer in your country.



Note: Do not take the blades off to fit the propeller.



WORKING INSTRUCTIONS 3-blade Gori Folding Propeller

Congratulations on choosing the 3-blade Gori Folding Propeller!

The 3-blade Gori folding propeller has been designed in such a way that if the propeller is in "overdrive" position, the boat will attain approximately the same speed at lower engine revolutions.

Do not press the engine to the utmost as this will result in overloading.

Do only use the overdrive function when motoring in calm weather and when using the engine under sail.

Gori Propeller disclaim the responsibility for any damage caused by overloading the engine. In case of doubt about the loading of the engine, you should contact the authorised engine service organisation and Gori Propeller.

Under sail

When sailing under sail the blades will fold, however, you should put the lever in reverse if the engine is not turned on. This will lock the shaft and ensure that the propeller folds and does not spin. You can then put the lever back into neutral.

With a hydraulic transmission you can not lock the shaft when the engine is turned off. Therefore the propeller must be folded, before you turn of the engine. See below, on how to sail in "normal ahead" to fold the propeller while motoring.

Normal ahead

The propeller usually opens in normal forward position, unless the boat has just been going astern. If you want to shift from "overdrive" to normal forward position, the lever will have to be put into neutral when the boat does more than 1 knot ahead, until the blades have folded again. Then in forward position again.

If the propeller is spinning with the engine in neutral, you must go gently in reverse, while the boat is moving forward. After the propeller has been going in reverse for a few seconds, you can go back to neutral, and the propeller will have folded and the shaft stopped. When you go back to forward, the propeller will be in normal ahead.

In case of harbour manoeuvres the propeller might get into "overdrive" position. Therefore, before leaving the harbour, please always check the position of the propeller by means of the boat's tachometer so that the propeller is in the wanted position.

Astern

In the reverse position the blades swing 180° opposite the forward position which ensures the same blade leading edge and profile – resulting in high efficiency. If the boat has not been used for some time, you should shift cautiously between forward and reverse a few times before sailing in order to clean the teeth of the blades and the gears from fouling.

Ahead "Overdrive"

In order to position the propeller in forward "overdrive" it is necessary to move the boat astern so that the blades are kept in reverse position when the lever is put into forward. Do not try to make the propeller go from forward to "overdrive" position by quick shifts with the lever when the boat is sailing ahead in the water.

Before going sailing, check that the propeller works in both forward and reverse.