



**Gori®
propeller**

Gori 3 & 4-blade "Overdrive"

The "Overdrive" function is to be used when motoring at a cruising RPM in fair weather or when motorsailing. Overdrive is a second larger pitch achieved by going forward with the propeller blades in the reverse position. The second higher pitch acts like 5th gear in a car and likewise can increase speed and efficiency.

By increasing the blade pitch, greater thrust and boat speed can be achieved at the same RPM or, likewise, the same boat speed can be achieved at a lower RPM, delivering greater cruising range, better fuel economy and less engine noise, vibration and wear.

How is this achieved?

The Gori propeller blades fold inside out when going from forward to reverse. The folding action presents the identical leading edge and blade shape in reverse as in forward, producing 100% thrust in reverse with minimal to no prop walk. When in the reverse position, the blades have a greater pitch than in forward by approximately 20% (2.0~3.0 inches). For example, a 17 inch pitch in standard forward will have a 20 inch pitch in reverse and, when you go forward with the propeller in reverse position, a 20 inch pitch in overdrive forward.

How to get it in and out of overdrive?

First you need to be able to tell which setting you are in and the max engine RPM will tell you that, i.e. say 2400 vs 3000 rpm.

If you are in standard forward at the higher RPM and want to go into overdrive:

1. Reduce the engine RPM and put the shift lever into neutral
2. Go into reverse
3. Raise the engine RPM several hundred for a few seconds
4. Reduce the engine RPM and move the shift lever to forward smartly without hesitation

You will now be in overdrive.

This action of going from ahead to astern to ahead smartly, *has put the propeller blades into the reverse position (they have rotated thru 180 degrees) but rotating in the fwd direction in the higher pitch setting, presenting the other edge of the blade.*

The blades will not have closed/folded completely to open in the normal (standard) position.

If you are in overdrive and want to go into standard forward:

1. Reduce the engine RPM and put the shift lever into neutral
2. Bump into reverse for a second which stops the shaft immediately
3. Wait several seconds (shaft should stop rotating), blades fold closed from forward motion and then shift back into forward



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This will give you the standard forward position.

By bumping into reverse and leaving the engine in neutral for several seconds you are allowing the shaft to stop rotating and the propeller blades to fold closed (action of water flow over the positively geared blades), then when you go back into forward the blades will open in the standard forward position.

To speed the shaft stopping and the blades folding when at higher boat speeds:

1. Reduce engine RPM
2. Go into neutral
3. Go into reverse for a second (“bump it”) without increasing engine RPM then
4. Go back into neutral, shaft stops/blades close and then into forward

This will have the affect of stopping the shaft rotation quicker and allowing the blades to fold before opening in the standard position.

Often just after leaving the marina slip you may find that the propeller is in **O**verdrive. This is due to when backing out of the slip and then shifting the into forward position - while the boat was still moving backwards - the blades will be in the overdrive position. Simply put the shift lever into neutral for a few seconds, make sure the shaft stops turning (bump into reverse for a second) and then back into forward and you will be in the standard forward.

Many Gori customers use overdrive for the vast majority of their motoring, only using standard forward in conditions that require great thrust and high RPM such as to power through heavy seas or quickly maneuver.