

# DUNNRITE PROPELLERS

## PROPELLER TIPS SIX

DUNNRITE PROPELLER SERVICES LTD  
61 Freyberg Street  
Tauranga 3110  
NEW ZEALAND  
Phone: 07 570 3339  
Mobile: 0274 919 460  
Email: [dunnrite@actrix.co.nz](mailto:dunnrite@actrix.co.nz)  
Website: [www.dunnritepropellers.co.nz](http://www.dunnritepropellers.co.nz)

Founded in 1995, Dunnrite Propellers are specialists in supplying, tuning and repairing marine propellers. A personal professional experience is assured when you deal with Dunnrite Propellers.

The following tips have been put together by Dunnrite Propellers so that boaties may quickly identify when a propeller should be serviced or replaced.

Propellers of the wrong size, propellers not fitted with an approved drive hub, and damaged or out of balance propellers if repeatedly used are often the reason for increased fuel consumption and motor and gearbox expenses on outboards, motors & stern drives.

### 5 POINT PROPELLER CHECK

1. If your propeller has little pieces missing from any of the blades or cracked, bent and out of shape blades get it serviced by a competent propeller technician. When possible, always have the propeller blade area maintained and restored by welding. Not all propeller vibrations are discernable but you can be assured damaged propellers do play havoc with shafts and bearings. Shafts and bearings are not cheap to replace or repair.
2. If your boat has a vibration you should first eliminate the propeller as being the cause. Damaged propellers, or poorly repaired props can cause vibrations. If your prop is causing a vibration only a good propeller repair or a replacement prop will fix the problem.
3. If your propeller slips or cavitates excessively under load, send it to a propeller technician. The key word here is excessive. Some prop slip or cavitation can be directly attributed to the boat's set up and/or operator error. In my view, too many boat owners are told to accept cavitation and prop slip that is excessive. If you are unsure about prop cavitation, see a propeller technician.
4. If your boat's motor is running properly but it cannot achieve the manufacturers recommended revolutions per minute, see a propeller technician ASAP. It is not possible to get the best fuel economy if you have a propeller of the wrong size.
5. If you are selling your boat, an unattractive or poorly performing propeller will affect resale. Get the propeller properly serviced. The correct propeller in good condition will help maintain a boats value.

## **THE DO NOTS !!!**

Do not grind the blades to remove any nicks or little missing pieces. Your propeller will lose diameter and blade size very quickly if you do. Such propellers can lose hydraulic balance and quickly become "paint stirrers".

Do not purchase second hand propellers on looks alone. Appearances can be very deceiving. The blades may look of the same shape and size but has someone ground the blades down to a smaller size? If so the propeller will only slip and not drive the boat properly.

## **SUMMARY**

If you are after extra performance tweaking and tuning of propellers is one way to get it. Remember the stock propeller as supplied with most outboards and stern drives is often a compromise.

Many outboard manufacturers supply their motors with a "standard" propeller but have no idea as to the type of craft it will be fitted to. The size and weight of the craft is unknown. Would one motor or two power it? What will be the "normal load" or "application"?

There is a good chance that if you have never really been happy with the performance of your boat under power, the size and type of the propeller fitted is incorrect for your application.

It is not possible to get the best fuel economy if you have a propeller of the wrong size.

Regardless of the number of blades, a correctly sized propeller is important to the overall performance of any propeller driven boat or vessel. Always remember, marine engine manufacturers do recommend how many RPM their engines should reach at WOT with a "normal load".

Gearbox & engine repairs do not come cheaply. If you have an outboard or stern drive, ensure any replacement propeller is fitted with a quality drive hub to protect the internal components of the gear case.

I look forward to assisting you further in the near future.

Cheerz

*Ric Dunn*