

NUMBER: 85-19

**NOTICE**  
**This Bulletin Supercedes**  
**Bulletin 83-20.**

CIRCULATE TO:  
SERVICE MANAGER   
PARTS MANAGER   
MECHANICS   
"Place in a Service  
Bulletin Binder"

## HIGH ELEVATION GEAR RATIO RECOMMENDATIONS FOR MERCURUISER MCM 120MR-thru-260MR MODELS

### **▲ CAUTION**

**Under no circumstances should a high elevation gear ratio be used on boats that will be operated at elevations below those specified on chart, as damage to drive unit may result. Damage resulting from the use of the improper gear ratio will not be covered by the MerCruiser Warranty.**

Boats which are operated at 3500 ft. (1067m) or above may require an alternate gear ratio to compensate for horsepower losses caused by the high elevation. (Refer to chart following for recommendations.)

The alternate gear ratios should improve performance and acceleration by allowing the use of 17", 19" and 21" pitch propellers on most boats. These propellers are more efficient than the 11", 13" and 15" pitch propellers that would otherwise be required if standard gear ratio was used. An alternate gear ratio that requires the use of a 23" or 25" pitch propeller should never be used.

If an alternate gear ratio is installed, the stern drive unit drive shaft housing **MUST BE** remarked to indicate the appropriate gear ratio. In addition, a Caution Decal, SIS-853 (shown below) **MUST BE** affixed to a visible location on the dash. This decal alerts the owner that his stern drive unit is equipped with an alternate gear ratio and that the gear ratio must be changed if the boat is to be operated at lower elevations. Contact your Regional Service Center to obtain these decals.

### **▲ CAUTION**

The MerCruiser Stern Drive on this boat is equipped with a gear ratio and/or propeller selected to optimize performance at higher elevations [above 3500 ft. (1067m.)]. If boat is to be operated at lower elevations, the gear ratio and/or propeller **MUST BE** changed. Contact your MerCruiser Servicing Dealer for details.

Failure to change gear ratio and/or propeller could result in engine damage from overspeeding. Drive unit damage also may result if gear ratio is not changed. Mercury Marine warranty is void on parts damaged as a result of incorrect gear ratio or propeller selection.

SIS-853 1-283

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## HIGH ELEVATION DRIVE UNIT GEAR RATIO RECOMMENDATIONS

<u>Elevation</u> <u>Boat Length</u>	<u>3500-6000 (Feet)</u>		<u>6000 and Above (Feet)</u>	
	<u>Up to 19'</u>	<u>19' and Above</u>	<u>Up to 19'</u>	<u>19' and Above</u>
120MR w/1.98	No Change	—————→	—————→	—————→
140MR w/1.98	No Change	—————→	—————→	—————→
170MR w/1.84	No Change	—————→	—————→	1.98:1
190MR w/1.84	No Change	—————→	—————→	1.98:1
*185MR w/1.84	No Change	—————→	—————→	1.98:1

\* 229 Cu. In. & 262 Cu. In.

<u>Boat Length</u>	<u>Up to 21'</u>	<u>21' and Above</u>	<u>Up to 21'</u>	<u>21' and Above</u>
200MR w/1.65	No Change	—————→	1.84:1	1.84:1
205MR w/1.65	No Change	—————→	1.84:1	1.84:1
230MR w/1.50	No Change	1.65:1	1.84:1	1.84:1
260MR w/1.50	No Change	1.65:1	1.65:1	1.84:1