

# Model MG-502 and MG-502-1 Marine Transmissions



**MG-502 and MG-502-1**

(Shown with optional housing flange and torsional drive plate)

\*Maximum allowable input speed:

With Diesel Engines ..... 4000 rpm  
With Gasoline Engines ..... 4200 rpm

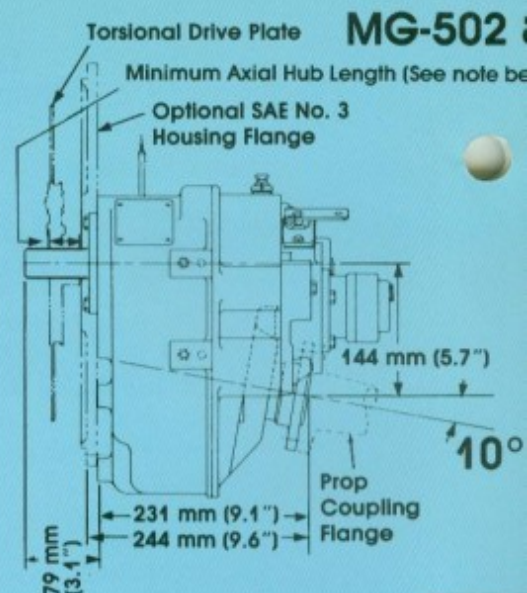
\*Unless granted prior written approval.

- Lighter and 1/2 the length of comparable capacity transmissions
- 10° output shaft down angle—provides for near level engine installation
- Permits lower deck and more usable room
- Oil controlled clutch engagement
- Carburized, hardened, conical helical gears
- No external plumbing
- Built with jig-bore accuracy
- Identical forward and reverse ratios: MG-502—2.47:1; MG-502-1—1.54:1 and 2.00:1
- Unlimited engine flywheel housing adaptability
- Identical performance forward or reverse—provides either left or right-hand propeller rotation with identical right-hand rotation engines

**QUIET OPERATION...MORE ON-BOARD LIVING AREA...  
GREATER DESIGN FLEXIBILITY.**

The MG-502 and MG-502-1 use conical involute gearing to provide a 10° down angle. This feature eliminates the need for engine installation at severe high angles and provides easier installation and more on-board living space.

Identical performance and ratios in forward or reverse eliminate the need for opposite rotation engines.



**Use Certified Print  
for Installation**

MOD

MG-50

MG-50

These lightweight, high-capacity marine transmissions permit the use of higher powered engines that are required for the best vessel performance. These units all have helical gears and torque capacity to accommodate most mid-range, high-speed diesels and high-performance gasoline engines. The MG-502-1 incorporates design and material improvements which allows its use at higher Pleasure Craft ratings than the MG-502.

Unlike most marine countershaft arrangements, this transmission with 10° down angle offers broader design flexibility for marine architects.

## Optional Equipment

Includes housing flange—SAE No. 3 (XB5690) or special adapter (XA7157) 235 mm (9.25") B.C.; prop coupling flange—SAE No. 2S (XB3431); and torsional couplings—SAE No. J620C—292 mm (11.5") (A7052A), polyurethane element (A7559), or 292 mm (11.5") elastomeric (PM8756A). **NOTE:** Customer sourced torsional drive plates other than from Twin Disc must have a minimum axial hub length of 35 mm (1.38") when used on MG-502's and a minimum hub length of 45 mm (1.75") when used on MG-502-1's.

## Heat Exchanger

Available from Twin Disc. Customers who wish to furnish their own heat exchanger should contact the nearest Twin Disc or marine engine distributor for exchanger specifications. When ordering, specify if raw or fresh water is to be used in the heat exchanger.