

Twin Disc - MG 509

STATUS	Available
REF. NUMBER	GB2144-M
MANUFACTURE	Twin Disc
TYPE	MG 509
RED.	??
FABRIKS NR.	Spec. S-2730 Serie 59??07
VESSEL	Vos Tiree





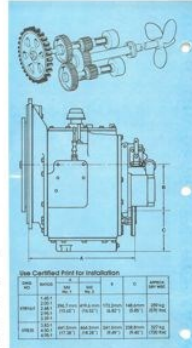
Model MG-509 Marine Transmission



Oil controlled clutch engagement
 Carbureted and hardened gears
 Emergency come-home feature
 Built with jig-bore accuracy
 Rubber block drive
 Ratios: 1.45:1, 2.00:1, 2.48:1, 2.95:1, 3.39:1, 3.83:1, 4.50:1 and 4.95:1
 Equipped with either SAE No. 1 or No. 2 housing
 Dry flywheel housing
 Both clutches removable with transmission attached to engine
 Identical performance and ratios forward or reverse
 Hydraulically-actuated and oil-cooled clutches shift with smooth, fast, fingertip response

The MG-509 Marine Transmission is the most popular marine transmission in its horsepower range.
 The 1.45:1, 2.00:1, 2.48:1, 2.95:1 and 3.39:1 ratio units are identical in design except for the size of the pinions and the countershaft gear. The 3.83:1, 4.50:1 and 4.95:1 ratio units use a deeper case as the center distance of the gears is greater. The carbureted and hardened gears are shroud-mounted on anti-friction bearings on short, rigid shafts. The transmission may be purchased with an SAE No. 1 or No. 2 housing.

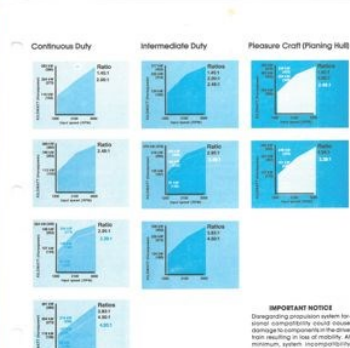
Three driving rings are available with the No. 1 housing and one driving ring with the No. 2 housing. Maximum sole speed with Part No. A-4914 driving ring is 2300 rpm. The MG-509 is designed for full horsepower operation continuously in either forward or reverse position.
 An externally-mounted heat exchanger, top-mounted power take-off, mating propeller shaft coupling flange and a trolling valve assembly are available as optional equipment with the MG-509 Marine Transmission. The



Use Certified Print for Installation

DWG NO.	RATIOS	SAE No. 1	SAE No. 2	B	C	APPROX. DRY WT.
X9816-F	1.45:1	396.7 mm (15.62")	419.6 mm (16.52")	173.2 mm (6.82")	148.6 mm (5.85")	259 kg (570 lbs)
	2.00:1					
	2.48:1					
	2.95:1					
X9835	3.83:1	441.5 mm (17.38")	464.3 mm (18.28")	241.0 mm (9.49")	238.8 mm (9.40")	327 kg (720 lbs)
	4.50:1					
	4.95:1					

Rolling valve is applicable to both right-hand and left-hand rotation engines turning either right-hand or left-hand propellers.
Heat Exchanger
 Kits available from Twin Disc consist of a heat exchanger with flexible hoses and necessary fittings for installation on the top cover plate of the transmission. Customers who wish to furnish their own heat exchanger should contact the nearest Twin Disc distributor for details. When ordering, specify if raw or fresh water is to be used in the heat exchanger. Heat exchanger can be remotely-mounted if a top PTO is used.



IMPORTANT NOTICE
 Designing propulsion systems for speed compatibility could cause damage to components of the drive train resulting in loss of mobility. At minimum, speed incompatibility could result in gear chatter or the breakage of gears.
 The responsibility for ensuring that the torsional compatibility of the propulsion system is satisfactory rests with the assembler of the drive and drive equipment.
 Torsional vibration analysis can be made for the engine, gearbox, shafts, couplings, and other train drive components to assure being suitable to prevent torsional problems that occur to the marine transmission.

For Service Classification Definitions see book cover

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 Three driving rings are available with the No. 1 housing and one driving ring with the No. 2 housing. Maximum sole speed with Part No. A-4914 driving ring is 2300 rpm. The MG-509 is designed for full horsepower operation continuously in either forward or reverse position.
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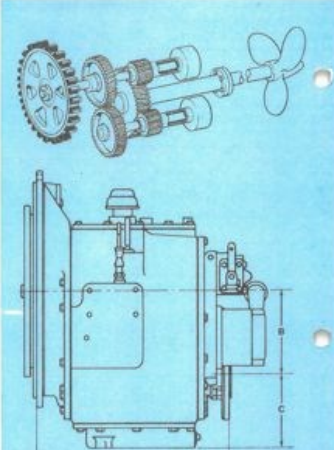
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