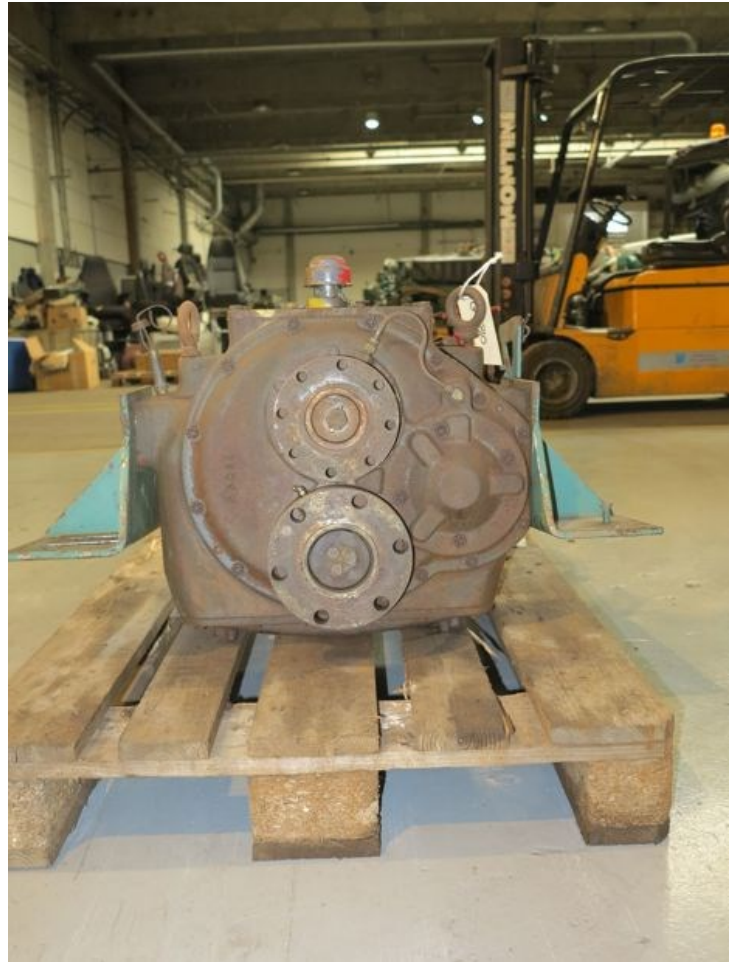


Twin Disc - MG 509

STATUS	Available
REF. NUMBER	GB810
MANUFACTURE	Twin Disc
TYPE	MG 509
RED.	1,45:1
FABRIKS NR.	Serial 594559 Spec. S-2595
REMARKS	oil capacity 2,8. 165 PSI







Model MG-509 Marine Transmission



- Oil controlled clutch engagement
- Carburized 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

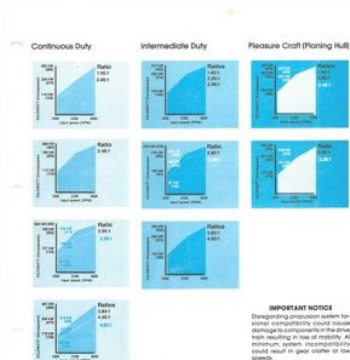
The MG-509 Marine Transmission is the most popular marine transmission in its horsepower range. The 1.45:1, 2.00:1, 2.48:1, 2.95:1 and 3.39:1 ratio units are identical in design except for the size of the pinions and the countershaft gear. The 3.83:1, 4.50:1 and 4.95:1 ratio units use a deeper case as the center distance of the gears is greater. The carburized and hardened gears are shrouded-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 Full No. 4-4914 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



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 kit is remotely-mounted if a top PTO is used.



IMPORTANT NOTICE
Engaging propellers under low speed compatibility could cause damage to components of the drive from resulting in loss of mobility. At minimum, correct compatibility could result in gear chatter or the shafts.

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 in the engine distributor's area. Contact independent consultants and others. Twin Disc's responsibility is to provide solutions to potential torsional problems that relate to the marine transmission.

For Service Classification Definitions see book cover

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Use Certified Print for Installation

DWG NO.	RATIOS	A	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")
	2.00:1				
	2.48:1				
	2.95:1, 3.39:1				
X9835	3.83:1	441.5 mm (17.38")	464.3 mm (18.28")	241.0 mm (9.49")	238.8 mm (9.40")
	4.50:1				
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