

# GB810 - Twin Disc

**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





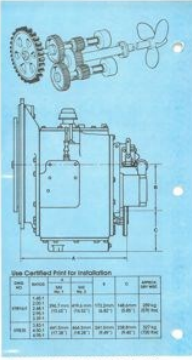


### Model MG-509 Marine Transmission

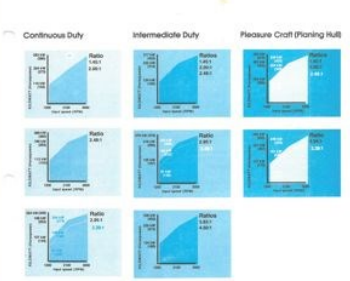


Oil controlled clutch engagement  
 Carbureted and hardened gears  
 Emergency come-home feature  
 Built with jig-bore accuracy  
 Rubber block drive  
 Ratios: 1.45:1, 2.00:1, 2.48:1, 2.95:1, 3.39:1, 3.83:1, 4.50:1 and 4.95:1  
 Equipped with either SAE No. 1 or No. 2 housing  
 Dry flywheel housing  
 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 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, or 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 can be remotely-mounted if a top PTO is used.



**IMPORTANT NOTICE**  
 Engaging propellers under load conditions could cause damage to components of the drive train resulting in loss of mobility. At maximum, impact, components could result in gear chatter or the shafts.  
 The torsional capability of the propeller system is determined with the assembly of the drive and drive equipment.  
 Torsional vibration analysis can be made in the engine distributor's area. Customers, independent consultants and others, familiar with the design of the drive train should be consulted to determine solutions to potential torsional problems that relate to the marine transmission.

For Service Classification Definitions see book cover

**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				
	4.95:1				

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