

# GB840 - Twin Disc

STATUS

Available

REF. NUMBER

GB840

MANUFACTURE

Twin Disc

TYPE

MG 509

RED.

4,50:1

HP IND

450

RPM IND

3000

FABRIKS NR.

Bom no. 37285 ser. No. 5R6009

REMARKS

Factory overhauled. Oil press 165-200 PSI @1800 rpm

### 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 and 2.95:1 ratio units are perfect 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 are identical in design except for the size of the pinions and the countershaft gear. The carburized and hardened gears are available in either forward or reverse rotation or both. The pinions and countershaft gear are available in either right-hand or left-hand propeller.

Rolling valve is applicable to both right-hand and 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 or marine engine distributor. When ordering, specify if raw or fresh water is to be used in the heat exchanger. Heat exchanger will be remotely mounted if a top PFD is used.

**Use Certified Print for Installation**

Ratio	SAE No. 1	SAE No. 2	A	B	C	APPROX. DRY WT.
1.45:1	145	145	173.2mm	148.8mm	15.85"	259 kg
2.00:1	200	200	173.2mm	148.8mm	15.85"	270 kg
2.48:1	248	248	173.2mm	148.8mm	15.85"	270 kg
2.95:1	295	295	173.2mm	148.8mm	15.85"	270 kg
3.39:1	339	339	173.2mm	148.8mm	15.85"	270 kg
3.83:1	383	383	173.2mm	148.8mm	15.85"	270 kg
4.50:1	450	450	173.2mm	148.8mm	15.85"	270 kg
4.95:1	495	495	173.2mm	148.8mm	15.85"	270 kg

**IMPORTANT NOTICE**  
Overhaul or production repair without compatibility could cause damage to components and the drive train resulting in loss of mobility. At minimum, system incompatibility could result in gear chatter or oil splash.

The responsibility for ensuring that the horizontal compatibility of the propeller system is satisfactory rests with the assembler of the drive and drive equipment.

Several alignment checks can be made for the engine flange, marine engine mounting, input and output shafts and drive. Twin Disc is prepared to send its loading advisors to perform on-site problems that apply to the marine transmission.

For Service Classification Definitions see back 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 safe speed with Part No. A-2011 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, a mating propeller shaft coupling flange and a rolling 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.

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