

GB840 - Twin Disc

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|-------------|---|
| 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 rigidity 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 perfect in design except for the size of the pinions and the counter-shaft 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 available on anti-friction bearings or short-life pinions. 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 safe 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, a 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

| Ratio | SAE No. 1 | SAE No. 2 | APPROX. DRY WT. |
|--------|-------------------|-------------------|-------------------|
| 1.45:1 | 395.7 mm (15.58") | 419.6 mm (16.52") | 148.6 mm (5.85") |
| 2.00:1 | 441.5 mm (17.38") | 466.3 mm (18.36") | 170.0 mm (6.69") |
| 2.48:1 | 487.3 mm (19.18") | 512.1 mm (20.16") | 191.4 mm (7.53") |
| 2.95:1 | 533.1 mm (21.00") | 557.9 mm (21.97") | 212.8 mm (8.38") |
| 3.39:1 | 578.9 mm (22.81") | 603.7 mm (23.77") | 234.2 mm (9.22") |
| 3.83:1 | 624.7 mm (24.62") | 649.5 mm (25.57") | 255.6 mm (10.06") |
| 4.50:1 | 716.5 mm (28.19") | 741.3 mm (29.18") | 297.0 mm (11.70") |
| 4.95:1 | 762.3 mm (30.00") | 787.1 mm (31.00") | 318.4 mm (12.53") |

IMPORTANT NOTICE
Overheating produced under load conditions may result in loss of mobility. All maximum ratings are based on the engine being used. The responsibility for ensuring that the horsepower of the engine and the transmission is satisfactory rests with the customer of the drive and drive equipment.

Several optional features can be made by the engine builder. These include: hardened marine survey equipment, tapered shaft components and others. Two dies is required to seal in loading solutions to prevent bearing problems that relate to the marine transmission.

For Service Classification Definitions see each cover.

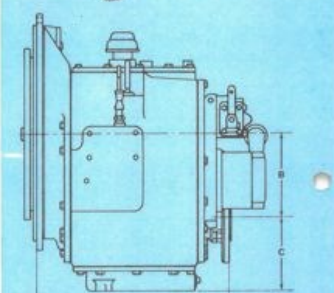
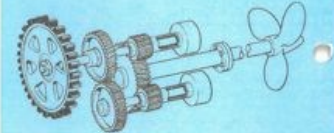
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- Built with rig-bore accuracy
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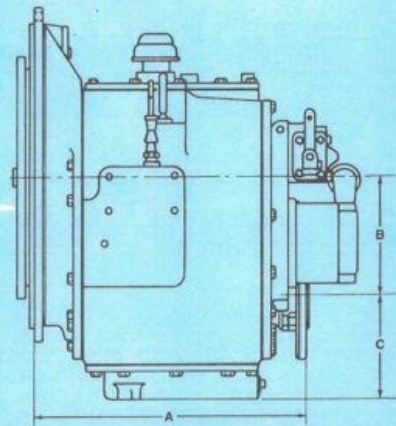
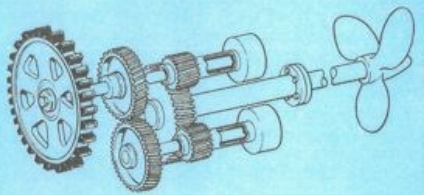


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trolling valve is applicable to both right-hand and left-hand rotation engines turning either right-hand or left-hand propellers.

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 or marine engine distributor. 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.



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| DWG. NO. | RATIOS | A | | B | C | APPROX. DRY WGT. |
|----------|--------|----------------------|----------------------|---------------------|---------------------|---------------------|
| | | SAE No. 1 | SAE No. 2 | | | |
| X9816-F | 1.45:1 | | | | | |
| | 2.00:1 | | | | | |
| | 2.48:1 | 396.7 mm (15.62") | 419.6 mm (16.52") | 173.2 mm (6.82") | 148.6 mm (5.85") | 259 kg (570 lbs) |
| | 2.95:1 | | | | | |
| X9635 | 3.53:1 | | | | | |
| | 4.52:1 | 441.5 mm (17.38") | 464.3 mm (18.28") | 241.0 mm (9.49") | 238.8 mm (9.40") | 327 kg (720 lbs) |
| | 4.95:1 | | | | | |