

GB844 - Twin Disc

STATUS

Available

REF. NUMBER

GB844

MANUFACTURE

Twin Disc

TYPE

MG 509

RED.

2,00:1

HP IND

470

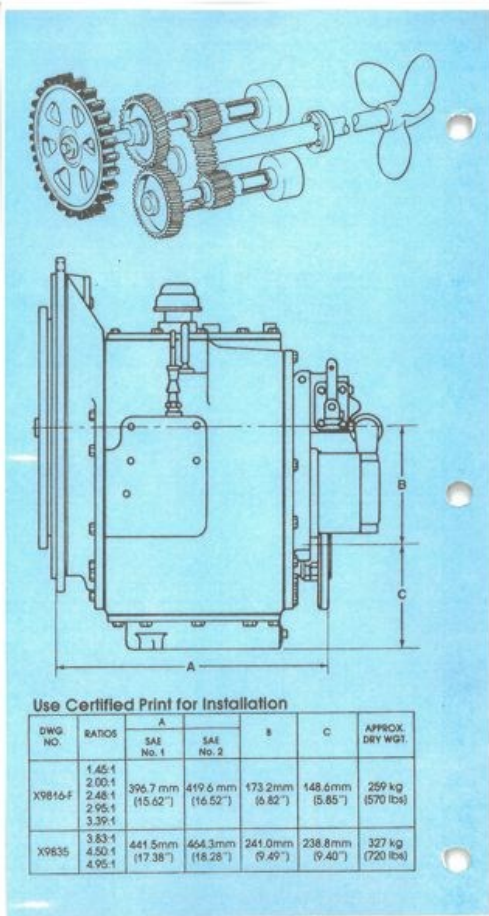
RPM IND

3000

FABRIKS NR.

Bom nr. 37213 Ser. No. 5BP438





Use Certified Print for Installation

DWG NO.	RATIOS	A SAE No. 1	SAE No. 2	B	C	APPROX. DRY WGT.
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	3.53:1	441.5 mm (17.38")	464.3 mm (18.28")	241.0 mm (9.49")	238.8 mm (9.40")	327 kg (720 lbs)
	4.52:1					
	4.95:1					

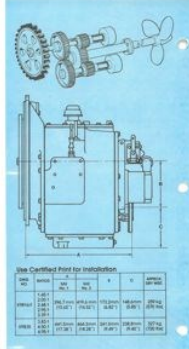
**Model MG-509
Marine Transmission**



Oil controlled clutch engagement
 Contained and hardened gears
 Emergency cone-belt brake
 Built with lightness in mind
 Rubber drive drive
 Ratios: 1.45:1, 2.00:1, 2.48:1, 2.95:1, 3.53:1, 4.52:1, 4.95:1
 Equipped with either SAE No. 1 or No. 2 housing
 Dry friction housing
 Both clutches removable with transmission obtained
 to engine
 Identical performance and ratio forward or reverse
 hydro-mechanical and cone-belt drive shaft
 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 3.53:1 ratios are
 identical in design except for the size of the gears and
 the output shaft. The 4.52:1 and 4.95:1 ratios
 utilize a 1/2 degree cone on the center distance of the
 gears to provide the contained and hardened gears
 all requirements in distribution bearing or shaft
 rigidity. The transmission may be purchased with an
 SAE No. 1 or No. 2 housing.

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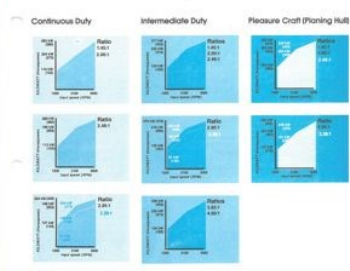


Use Certified Print for Installation

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	4.95:1					

Housing will be applicable to both right-hand and left-hand rotation engines turning either right-hand or left-hand propellers.

Heat Exchanger
 This model has a built-in cooling heat exchanger with fresh water and seawater passages in relation to the top cover plate of the transmission. Customers who wish to install their own heat exchanger should contact the nearest TWH Disc or marine engine distributor when ordering specific line or fresh water to be used in the heat exchanger. Heat exchanger can be retrofitted to existing TWH units.



IMPORTANT NOTICE
 Downgrading propulsion system for some compatibility could cause damage to components in the drive train resulting in loss of mobility. At minimum, system incompatibility could result in gear chatter or the shaft.

The responsibility for ensuring that the horsepower capability of the propulsion system is satisfactory rests with the designer of the drive and drive equipment.

Technical information, drawings, and manuals for the engine, gearbox, motor, motor, motor, independent and emergency and others. This is prepared to assist in finding solutions to potential operational problems that relate to the marine transmission.

For Service Classification Definitions see book 0000



Model MG-509 Marine Transmission



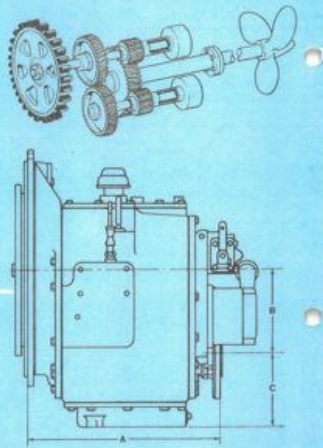
- Oil controlled clutch engagement
- Carbureted and hardened gears
- Emergency come-home feature
- Built with jig-bore accuracy
- Rubber block drive
- Ratios: 1.45:1, 2.00:1, 2.48:1, 2.95:1, 3.39:1, 3.83:1, 4.50:1 and 4.95:1
- Equipped with either SAE No. 1 or No. 2 housing
- Dry flywheel housing
- Both 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 straddle-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 safe speed with Part No. A-6911 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

Eng. No.	RATIO	X		B	C	APPROX. WT.
		SAE No. 1	SAE No. 2			
X9816-F	1.45:1					
	2.00:1	190.7 mm	179.6 mm	173.2 mm	148.6 mm	229 kg (510 lbs)
	2.48:1	(75.42")	(70.72")	(6.83")	(5.85")	
	2.95:1					
	3.39:1					
X9835	3.83:1	148.5 mm	146.3 mm	241.0 mm	238.8 mm	327 kg (720 lbs)
	4.50:1	(57.38")	(57.58")	(9.49")	(9.42")	
	4.95:1					

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.

