MERCRUISER SERVICE BULLETIN

Section: XII *(Bulletins)*
Number: 69-368-17
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Cut individual items along broken lines and attach in appropriate sections of your MerCruiser Service Manual.

A. MerCruiser III Drive and Engine Matching *(For Section II)*
B. MerCruiser III "325" and "250" Propeller Selection *(Sec. II)*
C. Bellows and Exhaust Tube - Periodic Inspection *(Section IX)*

A. MERCRUISER III DRIVE AND ENGINE MATCHING *(For Installation Section II)*

All MerCruiser III drives now are being produced with a 2:1 gear ratio for both MerCruiser "250" and "325" engines because of change in gear design. Previously, the MerCruiser "250" only had a 2:1 gear ratio, while the MerCruiser "325" used a 1.5:1 ratio.

The use of different gear ratios permitted the MerCruiser "250" with 2:1 gear ratio to use a higher pitch propeller than the MerCruiser "325" with a 1.5:1 ratio on identical hulls. See propeller charts, following.

A properly-matched drive and engine will allow the engine to develop its recommended RPM (3900-4300) with a propeller size selected from the appropriate propeller chart.

The drive gear ratio can be determined by checking the drive shaft to the propeller shaft rotation. One turn of the drive shaft on a 2:1 ratio will rotate the propeller shaft ½-turn. One turn of the drive shaft on a 1.5:1 ratio drive will rotate the propeller shaft 2/3-turn.

NOTE: The MerCruiser III drive with 1.5:1 gear ratio still will be produced for special applications but will not be furnished as a standard drive with MerCruiser "250" or "325".

B. MERCRUISER III "325" and "250" PROPELLER SELECTION *(For Installation Section II)*

MERCRUISER "250" and "325" PROPELLERS (2:1 GEAR RATIO) RPM: 3700-4200

RH Rotation Part No.	LH Rotation Part No.	Diameter	Pitch	No. of Blades and Material	Boat Length "250"	Boat Length "325"	Speed Range
B-48-47712A1	B-48-47711A1	18¾"	29"	3 Blade Alum.	18-20'	18-22'	46-52
B-48-47710A1	B-48-47709A1	19"	27"	3 Blade Alum.	18-22'	21-24'	43-49
B-48-47708A1	B-48-47707A1	19¼"	25"	3 Blade Alum.	20-24'	23-26'	38-45
B-48-47706A1	B-48-47705A1	19¾"	23"	3 Blade Alum.	22-26'	25-28'	34-40
B-48-47704A1	B-48-47703A1	20"	21"	3 Blade Alum.	24-28'	27-30'	30-36
B-48-47702A1	B-48-47701A1	20"	19"	3 Blade Alum.	24-29'	28-32'	25-32
B-48-47700A1	B-48-47699A1	20"	17"	3 Blade Alum.	26-31'	30-34'	20-26
B-48-47698A1	B-48-47697A1	20"	15"	3 Blade Alum.	28-33'	32-36'	17-22
B-48-47696A1	B-48-47695A1	20"	13"	3 Blade Alum.	WB• or HB•		1-18
B-48-47694A1	B-48-47693A1	20"	11"	3 Blade Alum.	Over 36'		1-15

MERCRUISER III "325" STERN DRIVE UNIT (1.5:1 GEAR RATIO) RPM: 3700-4200

B-48-47708A1	B-48-47707A1	19¼"	25"	3 Blade Alum.	18-22'	46-52
B-48-47706A1	B-48-47705A1	19¾"	23"	3 Blade Alum.	21-24'	43-49
B-48-47704A1	B-48-47703A1	20"	21"	3 Blade Alum.	23-26'	38-45
B-48-47702A1	B-48-47701A1	20"	19"	3 Blade Alum.	25-28'	34-40
B-48-47700A1	B-48-47699A1	20"	17"	3 Blade Alum.	27-30'	30-36
B-48-47698A1	B-48-47697A1	20"	15"	3 Blade Alum.	28-32'	25-32
B-48-47696A1	B-48-47695A1	20"	13"	3 Blade Alum.	30-34'	20-26
B-48-47694A1	B-48-47693A1	20"	11"	3 Blade Alum.	32-36'	17-22

•WB=Work Boat; •HB=House Boat

NOTE: The charts, above, are based on single engine installation. For dual installation, use propellers with 2 pitches higher than shown. Select propeller with next lower pitch when using cupped propeller(s) for single or dual installation.

C. STERN DRIVE BELLOWS AND EXHAUST TUBE - PERIODIC INSPECTION *(For Drive Unit Section IX)*

When performing periodic preventive maintenance to stern drive units, check the universal joint bellows, exhaust bellows, shift cable bellows and neoprene exhaust tube for cracks, signs of deterioration and proper installation. The clamps, which hold them, also should be checked to be certain that they are secure and in good condition. Testing and field operation have produced excellent results which indicate that periodic replacement of these components generally are not necessary.