



# MERCUISER SERVICE BULLETIN

Section: XII (Bulletins)  
Number: 69-268-15  
Date : 10/3/68

Cut individual items along broken lines and attach in appropriate sections of your MerCruiser Service Manual.

- A. MerCruiser II 1.78:1 vs. 1.33:1 Gear Ratio (For Section II)
- B. MerCruiser II "225" and "200" Propeller Selection (Sec. II)
- C. MerCruiser 160-120 New Flushing Adaptor (P. 15 of Section I)

## A. MERCUISER II 1.78:1 vs. 1.33:1 GEAR RATIO

(For Installation Section II)

On a MerCruiser II Stem Drive with MerCruiser 225 HP Engine installation, the 1.78:1 drive will use a 3-blade propeller of 2 or 3 pitches higher than the former 1.33:1 drive with a 2-blade propeller. This is based on higher pitch propellers (19" to 25") while increasing about two pitches on lower pitch propellers (13" to 17").

An increase of 2-3 MPH should be obtained under most circumstances.

Example:

Condition	Propeller	
	1.33:1 Drive	1.78:1 Drive
Light Boat	17" 2-Blade	23" 3-Blade
Heavy Boat	17" 2-Blade	21" 3-Blade

For MerCruiser 200 (1.78:1), use a 3-blade propeller 2 pitches higher than that recommended for early MerCruiser 225 (1.33:1).

Generally, the MerCruiser II and III drive unit anti-cavitation plate will be 1" below the boat bottom on heavy applications and work boats. On average or fast boats, the height of the anti-cavitation plate changes according to the "X" transom dimension.

**B. MERCUISER II "225" and "200" PROPELLER SELECTION**

*(For Installation Section II)*

**MERCUISER II "225" STERN DRIVE UNIT ( 1.78:1 GEAR RATIO)**

Propeller No.		Aluminum Propeller			Boat Length	Speed Range
LH Rotation	RH Rotation	Dia.	Pitch	Blades		
B-48-53497A1	B-48-53496A1	15½"	29"	3	Dual Fast	43-54
B-48-49979A1	B-48-49978A1	15¾"	27"	3	16-19'	40-50
B-48-49973A1	B-48-49974A1	16"	25"	3	17-21'	37-46
B-48-49971A1	B-48-49972A1	16-3/8"	23"	3	18-24'	34-42
B-48-33879A1	B-48-33880A1	16¾"	21"	3	23-28'	31-38
B-48-33881A1	B-48-33882A1	16¾"	19"	3	25-33'	28-35
B-48-33883A1	B-48-33884A1	16¾"	17"	3	Houseboat	25-31
B-48-33885A1	B-48-33886A1	16¾"	15"	3	Houseboat	15-28

**MERCUISER II "200" STERN DRIVE UNIT ( 1.78:1 GEAR RATIO)**

Propeller No.		Aluminum Propeller			Boat Length	Speed Range
LH Rotation	RH Rotation	Dia.	Pitch	Blades		
B-48-53497A1	B-48-53496A1	15½"	29"	3	Dual Fast	43-54
B-48-49979A1	B-48-49978A1	15¾"	27"	3	16-19'	40-50
B-48-49973A1	B-48-49974A1	16"	25"	3	16-19'	37-46
B-48-49971A1	B-48-49972A1	16-3/8"	23"	3	17-21'	34-42
B-48-33879A1	B-48-33880A1	16¾"	21"	3	18-24'	31-38
B-48-33881A1	B-48-33882A1	16¾"	19"	3	23-28'	28-35
B-48-33883A1	B-48-33884A1	16¾"	17"	3	25-33'	25-31
B-48-33885A1	B-48-33886A1	16¾"	15"	3	Houseboat	15-28

**C. MERCUISER 160-120 NEW FLUSHING ADAPTOR**

*(For P. 15 of General Information Section I)*

MerCruiser 160 and 120 model drive units now incorporate heavy, plastic water pump housing assemblies. This plastic water pump housing requires a new fresh water flushing adaptor (Figure 1) when flushing the engine (5/8-11 thread was 1/8-27 thread). Avoid placing side loads on the adaptor when flushing to prevent damage to the plastic water pump housing.

This flushing adaptor also will be used on future Merc 350 thru Merc 1250 outboard models.



Figure 1. Flushing Adaptor