

Section: XII (Bulletins)

Number: 70-6-02

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

A. Lubrication of Stern Drive Units (Section II)

B. Super-Duty Gear Lubricant Containers & Pumps (Sec. XI)

C. Shimming Procedure for Later 120-140 Drive Units (Sec. IX)

D. Wiring for Dock-Side Power (For Section X)

E. Radio Shielded Alternator Cable (For Section IV)

## A. LUBRICATION of STERN DRIVE UNITS

(For Installation Section II)

MerCruiser 60-80-90-120-140-160-165, MerCruiser II-215H-215E and MerCruiser III Stern Drive Units have drive shaft housing and gear housing oil chambers inter-connected thru an oil passage. Check oil at "Oil Vent" plug on drive shaft housing and add Super-Duty Gear Lubricant (C-92-52650) thru "Oil Fill" screw hole located on bottom leading edge of gear housing. DO NOT remove other vent or fill screws when servicing these gear housings (they will not be included in future housings).

NOTE: MerCruiser I-IA-IB-IC and E-Z Shift drive shaft housings and gear housing DO NOT have interconnected oil chambers and must be filled individually.

## B. SUPER-DUTY GEAR LUBRICANT CONTAINERS and PUMPS

(For Tool Section XI)

Super-Duty Gear Lubricant now can be purchased in 120 lb. (16 gal.) barrels (C-92-56101-1), with a corresponding Lubricant Pump and Hose Assembly (C-91-56982) to fit this container. To make the barrel mobile, a Dolly (C-91-56979) is available.

A new 37 lb. (5.2 gal.) pail of Super-Duty Gear Lubricant (C-92-56565-1) replaces the former 25 lb. (3½ gal.) pail (C-92-52645-1).

The new Super-Duty Gear Lube containers and equipment follow:

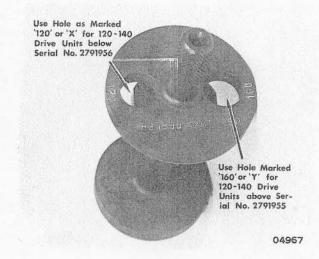
C-92-56101-1	Super-Duty Gear Lubricant -	\$ 85.00 U.S. List
	120 Lb. (16 Gal.) Drum	ф 63.00 U.S. List
C-91-56982	Gear Lubricant Pump -	41.50 Net U.S.
	120 Lb. (16 Gal.) Drum	
C-91-56979	Dolly - 120 Lb. (16 Gal.) Drum	13.90 Net U.S.
C-92-56565-1	Super-Duty Gear Lubricant -	25.00 U.S. List
	37 Lb. (5.2 Gal.) Pail	
C-91-26150	Hydraulic Pump -	15.30 Net U.S.
	37 Lb. (5.2 Gal.) Pail	

# C. SHIMMING PROCEDURE for LATER 120-140 DRIVE UNITS (For Stern Drive Unit Section IX)

When shimming MerCruiser 120 and 140 drive units (Serial No. 2791956 and above), disregard hole marked "120" or "X" in Pinion Shimming Tool (C-91-45878) (Figure 1) and use hole marked "160" or "Y" The later 120-140 pinion gear has its measuring surface in the same position as the 160 pinion gear. Use shimming tool (Figure 1) as marked.

MerCruiser 120-140 bevel gear position has not changed. Use shimming Tool C-91-45877 as marked.

Figure 1. Pinion Shimming Tool (C-91-45878)



#### D. WIRING for DOCK-SIDE POWER

(For Miscellaneous Section X)

ALUMINUM STERN DRIVES (AND OUTBOARDS) CAN BE BADLY DAMAGED BY CORROSION, if their boats are wired improperly for AC shore power.

A wiring system, which was satisfactory for an inboard yacht, may be completely unsatisfactory for a stern drive (or outboard) equipped boat. Steel will corrode sacrificially to protect bronze. If an inboard yacht is grounded to a steel bulkhead, the steel of the bulkhead actually may provide some cathodic protection to the bronze underwater hull appendages.

When aluminum housings or an aluminum hull is grounded to the same bulkhead, the aluminum will corrode as a sacrificial anode to protect the bulkhead.

Normally, an electrical ground is not made intentionally to a bulkhead, but this can occur when the craft is grounded thru a dockside power cord. Generally, such installations are made properly for craft with stern drives (or outboards) by skilled marine electricians who avoid electrical continuity between aluminum housings and the shore-based ground. In some instances, an isolation transformer is used, but it still is essential that the drives and all associated equipment have no continuity with a shore-based ground. This grounding thru the shore power line must be avoided, even if the craft has sacrificial anodes or MerCathode, an impressed current cathodic protection system.

A high-capacity, cathodic protection installation may overcome a ground thru the shore-based power line, but this MUST BE CHECKED CAREFULLY WITH A MERCATHODE TESTER (C-91-46802A1).

# E. RADIO SHIELDED ALTERNATOR CABLE

(For Ignition Section IV)

A radio shielded alternator cable (B-56785) should be used in conjunction with Radio Shielding Kits B-54094A3-A4-A5-A6 to provide optimum radio shielding. This special braided cable attaches from the alternator to the voltage regulator but is not required on new integral charging system alternators.