WESTERBEKE

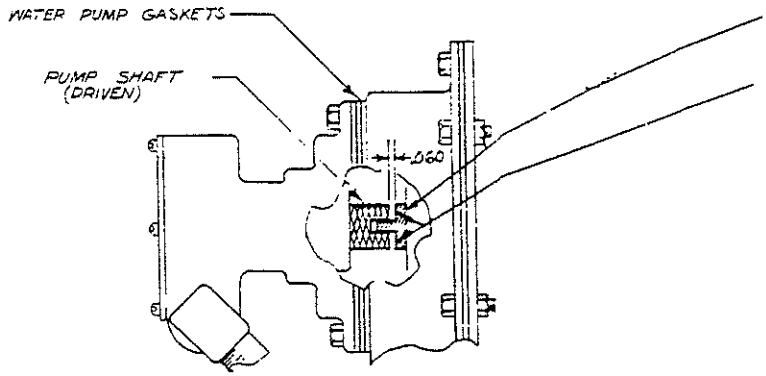
MARINE ENGINE PRODUCTS

SERVICE BULLETIN #10

SUBJECT: Sea Water Pump Clearance and Alignment

MODEL: Westerbeke 40 and WPDS 10-15

Clearance:
Adequate longitudinal clearance between the sea water pump shaft and the driving shaft is established by the use of multiple pump gaskets. The number of gaskets required can vary from 1 to 4. Enough gaskets must be used so that the shaft ends do not mate. See figure 1.



NOTE:
The application of liquid or paste type Prussian blue (at points indicated by arrows) will give positive indications of pump drive contact which will require the use of additional gaskets.

If the proper clearance is not maintained, the sea water pump shaft will force the fuel pump drive hub against its bushing. The bushing will seize to the drive hub and rotate in its housing. Bushing wear and loss of oil pressure will result.

When replacing the sea water pump be sure that the same number of gaskets is replaced and there is the required clearance.

Alignment:
Alignment is just as critical as clearance. The latest 1/2" pump intentionally has no pilot because the location of the timing cover itself is not precise. To assure that the pump shaft is axial with the driving shaft, install the pump with the four nuts just snugged. WITH THE FUEL STOPLEVER OFF, crank the engine for a few seconds. If the nuts have not been overtightened, the drive tang will cause the pump to align itself. It is best to deliberately offset the pump against its studs so you can visually verify movement of the pump as it centers itself during cranking. The nuts should then be tightened. This procedure must be repeated anytime the pump is loosened.