

SERVICE BULLETIN

DATE: 5 August 1991

BULLETIN NUMBER: 195

MODEL: Universal Model M25, M25XP, M30, Model 5424 and 5432

SUBJECT: Heat Exchanger #299049

Early versions of the above model Universal propulsion engines were configured with a two inch diameter heat exchanger P/N #299049 where as later and current production models have a three inch diameter heat exchanger P/N #299835.

Complaints have been received from the field on some of the above early model engines regarding high water operating temperatures (above 190 degrees F). Complaints of overheating when operating the engine at high or maximum rated engine r.p.m.

These complaints are possibly related to the heat exchanger size used on these early models. One should keep in mind that there are other components and areas of the engine's cooling system that could cause or contribute to high operating temperatures and overheating. These are:

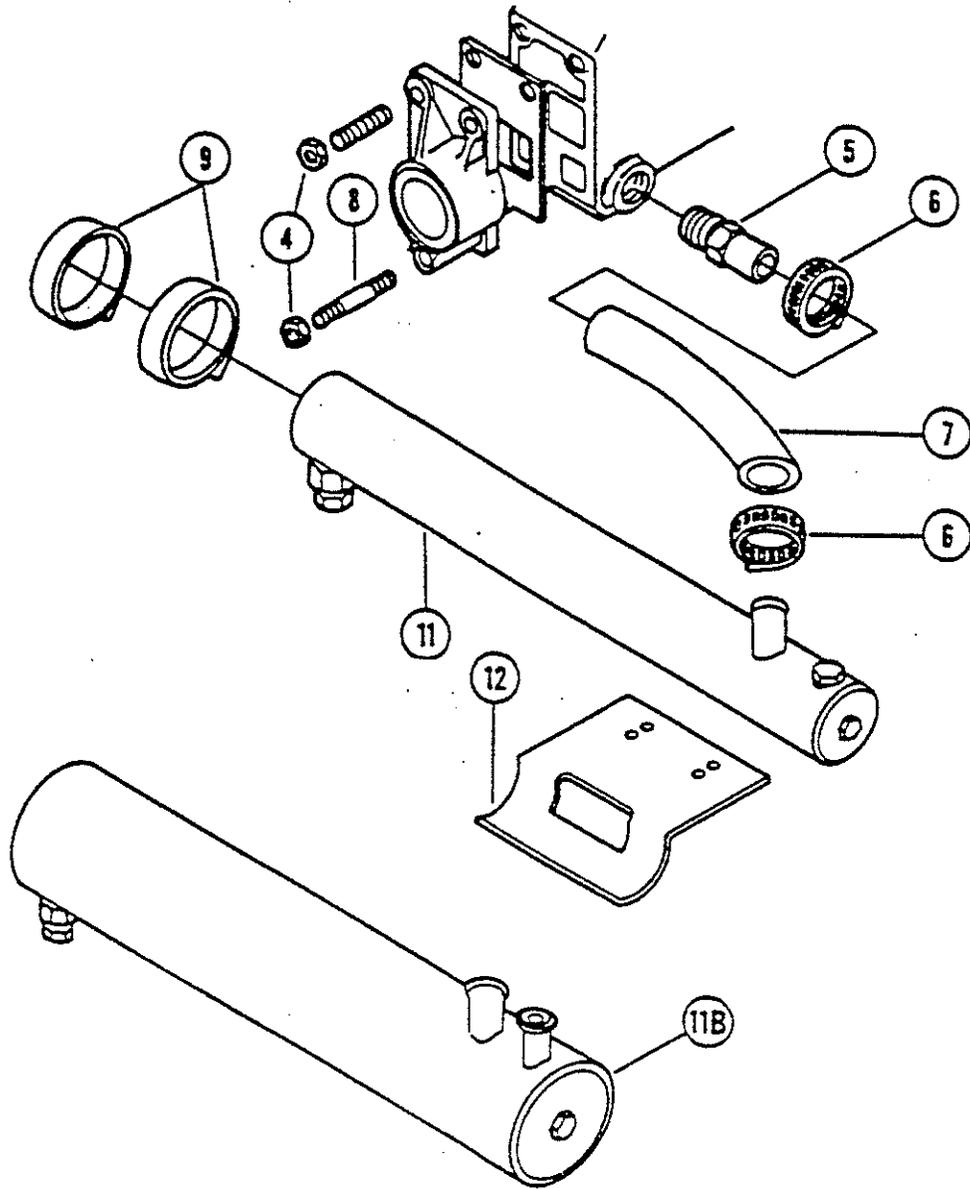
1. Supply hose to the raw water pump. Hose material should be wire reinforced so as not to collapse due to pump suction. This hose should be neatly routed so as to avoid sharp bends or possible kinking that would obstruct water flow.
2. The raw water supply hose inside diameter should be as large as a standard hose nipple will allow the raw water pump to accept without bushing up. (Example - pump inlet 1/2 N.P.T. standard nipple will accept 3/4 I.D. hose).
3. Raw water pump internal wear and impeller fatigue.
4. Reduced flow of raw water and/or fresh water through the heat exchanger due to corrosion, scale or debris inside the exchanger.
5. Internal corrosion of the water injected exhaust elbow causing raw water flow restrictions.
6. Domestic hot water heater improperly plumbed into the engine's fresh water circuit.

If these areas 1-6 have been inspected and any faults that are found are corrected and overheating still occurs, it is recommended that the operator consider replacing the two inch diameter heat exchanger (P/N #299049) originally supplied with the engine with the three inch diameter heat exchanger Universal incorporated on later models (P/N #299835).

Revised
January 1992

The illustration shows this larger heat exchanger, reference #11B. The contoured mounting bracket reference #12 will have to be reworked to fit the contour of the larger exchanger. This can easily be done by removing the bracket and using a piece of three inch iron pipe as a template to rework the bracket to the proper contour. Use two cushions #033487 between the exchanger body and the bracket along with heavy duty clamps (P/N #303070) when mounting the heat exchanger to the reworked bracket. The illustration helps show these components.

Heat Exchanger Group - New Style



Ref #	Part Number	Description
9	303070	Heavy Duty Clamp
11	299049	2 Inch Exchanger
11 B	299835	3 Inch Exchanger
12	301142	Mounting Bracket
14	033487	Cushion Pad

Note: The issuance of this Service Bulletin is not justification for the submitting of a warranty claim to Westerbeke Corporation related to the purchase or installation of any of the parts mentioned in this bulletin.