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CIRCULATE TO: SERVICE MGR.

PARTS MGR.

MECHANICS

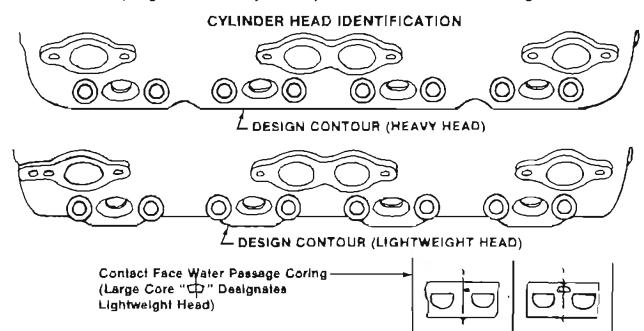
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MERCRUISER MODELS 898/228/250/260 and MIE MODELS 198/228/255 CYLINDER HEAD ASSEMBLIES

New, lightweight cylinder heads for the above MerCruiser V-8 Engines were released for 1978 production. The new heads are approx. 6 pounds lighter than earlier style heads, due to water passage internal coring changes and slight outer configuration modifications.

These lightweight heads were used, together with the earlier style or "heavy" heads, because of production requirements and limited machining capacities at the manufacturer's casting and machining plants. Therefore, the subject MerCruiser (1978) V-8 Engines may be assembled with either "heavy" or "light" heads or one of each type.

Also, the lightweight heads consist of two designs (from differences in the machining of the exhaust valve spring seats). Identify these cylinder heads from the following information:



LIGHTWEIGHT HEAD - 1ST DESIGN

Exhaust valve spring seats are machined to "heavy" head specifications (uses B-24-48347 valve spring assembly for inlet valve and B-24-72642 valve spring assembly for exhaust valve).

LIGHTWEIGHT HEAD - 2ND DESIGN

Incorporates machining that allows inlet valve spring assembly (B-24-48347) to be used at both inlet and exhaust valve locations.

The valve springs can be identified by paint stripes and measurements, as follows:

B-24-48347 - Inlet Spring - (one lavender stripe) approx. 2.03" (2-1/32" or 5.16cm) (ree height

B-24-72642 - Exhaust Spring - (2 light green stripes) approx. 1.91" (1-29/32" or 4.85cm) free height

The cylinder heads can be identified by measuring from the top of the exhaust valve guide to valve spring seat (exhaust only).

If the dimension is .75" (34" or 1.91cm), use B-24-72642 valve spring (1st design head). If the dimension is .84" (27/32" or 2.14cm), use B-24-48347 valve spring (2nd design head).

Service cylinder heads must be identified by this method to ensure correct valve spring usage prior to installation.

EXHAUST VALVE STEM DIAMETER/GUIDE BORE

All early style "heavy" cylinder heads have exhaust valve guide bores machined to accept .341" (8.661mm) exhaust valve stems. (Exhaust valve B-35323).

Late style "lightweight" cylinder heads were manufactured with both .341" (8.661mm) and .372" (9.449mm) exhaust valve stem diameters.

MCM 898 models with "lightweight" cylinder heads use exhaust valves with .341" (8.661mm) stem diameter (B-85803).

MCM/MIE 228, MIE 255 and MCM 260 models with "lightweight" cylinder heads normally use exhaust valves with .372" (9.449mm) stem diameter (B-87284); HOWEVER, there have been instances where small diameter .341" (8.661mm) exhaust valve (B-85803) stems and guide bores have been found in these models. It is imperative, therefore, that precise measurements of exhaust valve stem/guide dimensions be taken when ordering replacement exhaust valves for these models.

REPLACEMENT CYLINDER HEADS

When ordering replacement cylinder heads, use the information in this bulletin to determine if early style "heavy" or late style "lightweight" cylinder heads are required, then order from the following chart:

MODEL	"HEAVY"	"LIGHTWEIGHT"	NOTE: All MIE 198 model
MCM 898	B-938-6536	B-938-7482	"heavy" heads (B-938-65
MCM/MIE 228	B-938 - 6536	B-938-7482	MCM 250 models use "he
MCM 260/MIE 255	B-938-4625	B-938-7499	head (B-938-4625).

All "lightweight" service replacement cylinder heads are 2nd design configuration; therefore, if a replacement cylinder head is required for an engine, that is originally equipped with a 1st design "lightweight" cylinder head, new exhaust valve springs (B-24-48347) also must be installed (4 required per cylinder head).

In addition, all "lightweight" service replacement cylinder heads use exhaust valves with .372" (9.449mm) stem diameter. Because of this, when installing a replacement "lightweight" cylinder head on a MCM 898, new exhaust valves (B-87284) also must be installed.

Any model MerCruiser V-8 engine (referred to in this bulletin), which was originally equipped with an early style "heavy" cylinder head, can be converted to late style "lightweight" cylinder head only if the proper exhaust valves and exhaust valve springs also are installed (in accordance with the information in this bulletin).