

Circulate to:  Sales Manager  Accounting  Service Manager  Technician  Parts Manager

## SportJet Pump Pinion Location Tools

### Models Affected

All models of Mercury SportJet pumps.

### Situation

Some of the Mercury service manuals for the SportJet versions list an incorrect tool part number for locating the position of the pinion in the jet pump. This can cause an incorrect reading for the pinion height and an incorrect assembly. When using the incorrect tool, it will be obvious the location is incorrect as a large number of shims will be required, the pump assembly will not physically assemble if shimmed to the location indicated by the incorrect tool or the assembly will have a very large backlash issue.

### Correction

These are the correct service tools needed to locate pinion height.

Part No.	Pump Style	Models
91-824890T	Original SportJet pump, and XR pump	SportJet 90, 120, 95XR, 120XR
91-831897	XR2 pump, and M2 pump	SportJet 120XR2, 175, 200, 210, and 240.
91-882758	M2 pump	SportJet 250

The first service tool was developed for the original 6.50" SportJet pump and was used on the original 90hp and 120hp models. The pump was revised and re-designated to the XR pump. This pump was used for two new models, the 95XR and 120XR. These pumps are considered Force powerhead pumps. The 91-824890T pinion shimming tool should be used for both of these pumps.

The XR pump was replaced by the 7.25" pump, designated the XR2, and first used on the 175hp SportJet. A 120hp model was developed that used this same pump. Its model designation is the 120XR2. Only a few of these pumps were ever built. This same 7.25" XR2 pump was modified and was re-designated to the M2 pump. This M2 pump was used on the 200 OptiMax, 210 carb, and 240 EFI models. These same models were also later sold under the XR2 designation. With the exception of the single 120 hp model, this pump is what is considered the 2.5L model pump. The 91-831897 pinion shimming tool should be used for both of these pumps, XR2 and the M2.

The latest version of this pump was developed for the 250 OptiMax model. In both the M2 and XR2 designation, this pump varied from the 2.5L pump because of a required change in gear ratio. This pump is what is considered the 3.0L pump, and would use the 91-882758 shimming tool.

THE INFORMATION IN THIS DOCUMENT IS CONFIDENTIAL AND PROTECTED BY COPYRIGHT AND IS THE PROPERTY OF MERCURY MARINE.

This document is provided for the sole and exclusive use of the original recipient as prescribed by Mercury Marine and may not be distributed or copied, digitally or otherwise, without the prior written consent of Mercury Marine.

This part number information for the pinion location tools will be updated in the service manuals at the next revision.

THE INFORMATION IN THIS DOCUMENT IS CONFIDENTIAL AND PROTECTED BY COPYRIGHT AND IS THE PROPERTY OF MERCURY MARINE.

This document is provided for the sole and exclusive use of the original recipient as prescribed by Mercury Marine and may not be distributed or copied, digitally or otherwise, without the prior written consent of Mercury Marine.