

# Service Bulletin

Bulletin No. 2013-09 OEM No. 2013-08

Circulate to:

Sales Manager

Accounting

Service Manager

Technician

Parts Manager

## Oil Requirements for Gasoline Engines and Preventing Contamination of Engines with Emissions Control

NOTICE

This bulletin supersedes the previous bulletin number 2008-01/OEM-2008-01 February 2008.

#### Models Affected

| Model                                      | Serial Number Range |
|--|---------------------|
| Gasoline Sterndrive                        | All                 |
| Gasoline Inboard                           | All                 |
| Gasoline Tow Sports                        | All                 |
| Gasoline Sterndrive with Emissions Control | All                 |
| Gasoline Inboard with Emissions Control    | All                 |
| Gasoline Tow Sports with Emissions Control | All                 |

#### Scope

Worldwide

#### Situation

The following crankcase oil recommendation includes newly available engine oils, and supersedes all previous crankcase oil recommendations for MerCruiser gasoline engines. Excluded are MerCruiser Racing engines that are 500 horsepower and higher.

This service bulletin contains the best available recommendation from Mercury Marine as of July 2013. If the owner's manual, which is updated from time to time, is not consistent with recommendations made in this bulletin, follow the recommendation of this bulletin. Mercury's new 4-Stroke oils, both mineral blends and synthetic blends, outlined in this bulletin are now catalyst compatible through an extensive five year Engineering development program.

Engine packages with emissions control have catalysts that will be rendered ineffective if they become contaminated with certain elements or compounds. These packages require special lubricants as described in this bulletin.

### Engine Oil Recommendations for MerCruiser Gasoline Engines

For optimum engine performance and maximum protection, use the following oil:

| Application  | Recommended Oil   |
|--|---|
| All MerCruiser engines (excluding MerCruiser Racing engines 500 horsepower and higher) | Mercury/Quicksilver 25W-40 Synthetic Blend Engine Oil, NMMA<br>FC-W Catalyst Compatible rated |

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.

IMPORTANT: Lubrication requirements for catalyzed engines differ from the requirements for noncatalyzed engines. Some marine-grade lubricants contain high levels of phosphorus. Although these high-phosphorus lubricants may allow acceptable engine performance, exposure over time will damage the catalyst. Catalysts damaged by lubricants containing high levels of phosphorus may not be covered by the MerCruiser Limited Warranty.

If Mercury/Quicksilver 25W-40 Synthetic Blend Engine Oil is unavailable, use the following lubricants, listed in order of recommendation.

1. Mercury/Quicksilver 25W-40 Mineral NMMA FC-W Catalyst Compatible.

#### IMPORTANT: If you are servicing a catalyst engine, use the following oils for short periods of time only.

- 2. Other recognized brands of NMMA FC-W Catalyst Compatible rated 4-cycle oil.
- 3. Other recognized brands of NMMA FC-W rated 4-cycle oils.
- 4. A good-grade, straight-weight detergent automotive oil according to the last row of the operating chart below.

**NOTE:** We do not recommend nondetergent oils, multi-viscosity oils (other than as specified), non-FC-W rated synthetic oils, low-quality oils, or oils that contain solid additives.

Use the following information for selecting the type of oil according to the order of preference.



#### Preventing Contamination of the Emissions Control System

Catalysts and oxygen sensors can become contaminated, leading to component failure. Phosphorus, found in some marine-grade oils, and other compounds will damage or destroy a catalyst's ability to clean the exhaust. Catalyst-friendly oils, like Mercury Synthetic Blend Engine Oil or Mercury 25W-40 mineral oil, prevents this damage. Approved oils must be used in MerCruiser engines with emissions control.

Acetoxy silicone sealants and other compounds in the exhaust stream can damage oxygen sensors and catalysts. Do not use nonapproved compounds and sealants. Oxime silicone sealants and Loctite 587 High Performance Blue can be safely used with catalyzed engines.

Fiberglass, a silica-based material, can contaminate the catalyst and the oxygen sensors. To reduce the possibility that the engine will ingest harmful fiberglass and thereby poison the emission control components, protect the engine from fiberglass dust and debris during construction and clean-up.

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.

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