



Service Bulletin

Bulletin No. 2009-28

Circulate to: Sales Manager Accounting Service Manager Technician Parts Manager

FourStroke Outboard Carburetor Service Recommendations

Models Affected

Models Covered
All FourStroke outboards that utilize a carburetor for fuel delivery

Situation

Mercury Marine has received reports of poor engine performance due to dirty/contaminated carburetors. This contamination is caused by impurities in the fuel and can be accelerated by the use of ethanol/alcohol blended fuels. Please refer to **Service Bulletin 06-10R1** for further information about ethanol fuels and proper fuel storage. Also, please refer to **Service Bulletin 09-12** for information on testing the ethanol content in fuel.

Correction

Due to the small passages located in the above mentioned carburetors, use of an aerosol carburetor spray or conventional dip tanks for cleaning may be unsuccessful. The preferred method of cleaning requires complete disassembly of the carburetor and a thorough cleaning of the carburetor and its components in an ultrasonic cleaner. The ultrasonic cleaner and the recommended detergent can be obtained through your local tool supplier or can also be ordered from Mercury Marine's preferred tool supplier:

Hassel Material Handling Co.
Phone: (414) 616-6680
Fax: (414) 616-6696

When a carburetor is going to be cleaned, it must be completely disassembled. Please refer to the respective service manual for carburetor removal, disassembly, installation, and adjustment instructions. This disassembly procedure includes removing the idle mixture screw. The idle mixture screw on many carburetors is covered by a tamperproof cap. In order to remove the idle mixture screw, this tamperproof cap will need to be removed. Use the procedure listed below for removing the tamperproof cap, idle mixture screw, and reinstalling the components.

1. Use a center punch to mark the middle of the tamperproof cap.
2. Using a 3.0 mm (1/8 in.) drill bit, drill out the tamperproof cap, being careful to drill into only the cap and not the carburetor body or the idle mixture screw.
3. Using a flat blade screwdriver, count the number of turns that are required to lightly seat the idle mixture screw. Record this information as it will be required during reassembly.
4. Remove the idle mixture screw from the carburetor body and retain the spring located on the idle mixture screw for reassembly. Inspect the idle mixture screw for any damage.
5. Clean the carburetor and components following the recommendations from the supplier of the ultrasonic cleaner.
6. Reinstall the idle mixture screw and spring into the carburetor body; turn the idle mixture screw in until lightly seated.
7. Turn the idle mixture screw out the amount of turns recorded in step 3.
8. Install a new tamperproof cap over the idle mixture screw; the tamperproof cap part number is 19-880814.

After the carburetor has been serviced and reinstalled on the engine, be sure to make all idle speed adjustments. For information on these adjustments, please refer to the respective service manual for the model that you are servicing. If these adjustments are not properly set, the engine may start hard and run poorly. Please refer to the appropriate service manual for these procedures and specifications.

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Warranty

Cleaning of carburetors is NOT considered a product defect and will NOT be covered under product warranty.

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