

Lean Condition Between 2000 and 3500 RPM - 135 Thru 200

Mariner and Mercury

1990 thru 1992

135 thru 200

S/N 0C221500 thru 0D181999

Outboards listed when operated between 2000 and 3500 RPM may run lean and:

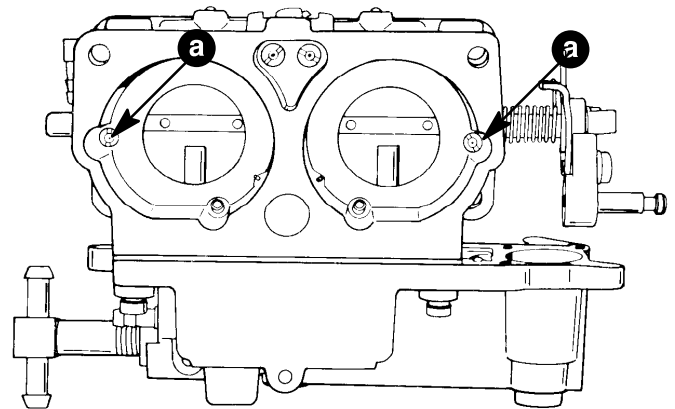
- gradually loose engine speed and eventually quit running.
- or
- lean surge (engine speed varies 100 to 300 RPM).

The test to verify if the engine is lean at a particular RPM is to quickly actuate the choke (enrichener) when the engine is running at the problem RPM. If the engine was lean, the engine speed will stabilize and may even increase 100 - 200 RPM.

ENGINE GRADUALLY LOSING ENGINE SPEED AND EVENTUALLY QUILTS RUNNING may be caused by incorrect progression air jets. Only 1991 and 1992 carburetors listed below are suspect to the lean condition that causes the engine to loose RPM and eventually quit.

Correct the lean condition by change the existing progression air jet in all three carburetors from 0.070 to 0.048 inch. Part number of the 0.048 jet with 8-32 thread is 815633048. Six (6) jets are required per engine.

Year	Model	Carburetor
1991	150	WMH 9
	175	WMH 11
1992	135	WMH 12A & 12B
	150	WMH 13 & 13B
	MAG III/XR6	WMH 14
	175	WMH 15
	200	WMH 16



a - Progression Air Jet

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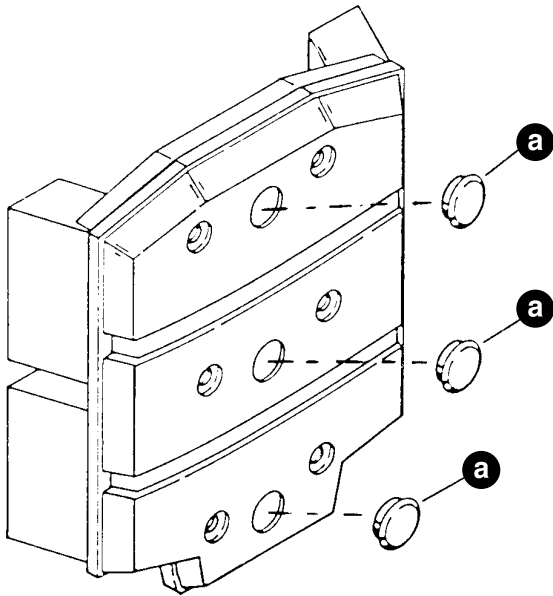
Figure 1. Jet Location

ENGINE LEAN SURGING may be caused by increased vacuum created in the air box.

Correct by changing the following items in the steps listed. Rerun the engine after each step to check if the problem is corrected.

Step 1.

REMOVE THE THREE PLUGS IN THE FRONT OF THE ATTENUATOR.



a - plugs

Figure 2. Attenuator

Step 2.

DRILL THE IDLE AIR/BACK DRAG CAVITY.

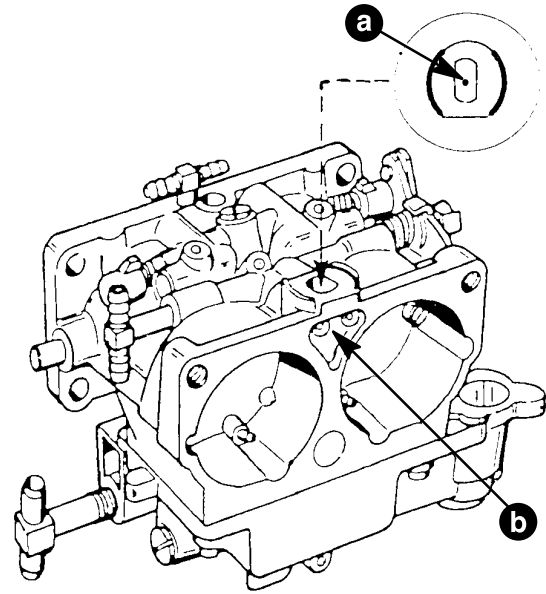
Remove the sound attenuator cover and all three carburetors.

Place a small amount of grease on the end of the drill bit to help retain drilled material.

Drill a 9/64 inch (3.57 mm) hole in the center of the upper carburetor casting pocket to the idle air/back drag jet cavity on each carburetor.

IMPORTANT: Remove any drilled material from the idle air/back draft jet cavity.

Reinstall carburetors, sound attenuator and synchronize carburetors. Carburetors installed on 1993 outboards (s/n 0D182000 and above) have the hole drilled.



a - Drill Hole Location

b - Idle Air/Back Drag Jet Cavity

Figure 3. WMH Carburetor

Step 3.

REPLACE THE THREE CARBURETORS.

Install:

135 WMH 28-1, 28-2, 28-3
p/n 3311-818650A16, A17, A18

150 WMH 23-1, 23-2, 23-3
p/n 3311-818650A10, A11, A12

150 Mag III/XR6 WMH 25-1, 25-2, 25-3
p/n 3314-821684A-1, A-2, A-3

175 WMH 22-1, 22-2, 22-3
p/n 3314-818650A-7, A-8, A-9

200 WMH 21-1, 21-2, 21-3
p/n 3314-818650A-4, A-5, A-6

WARRANTY:

Complete warranty listing:

Outboard serial number.

CHANGE PROGRESSION AIR JET:

Qty. 6 p/n 815633048 Jet.

One (1) hour labor to diagnose, replace all 6 progression jets and test.

Warranty labor rate code NJC.

Failure code 703 00.

REMOVE THE THREE PLUGS IN THE FRONT OF THE ATTENUATOR:

One (1) hour labor to diagnose, remove the three plugs and test.

Warranty labor rate code NJC.

Failure code 703 00.

DRILL THE IDLE AIR/BACK DRAFT CAVITY:

Qty. 5 p/n 54-816311 Sta-strap.

Qty. 3 p/n 27-67751--1 Carburetor gasket.

Qty. 3 p/n 27-89221--1 Air box gasket.

Four (4) hours labor to diagnose, drill all three carburetors and test.

Warranty labor rate code NJC.

Failure code 703 15

REPLACE THE THREE CARBURETORS:

Qty. and p/n of carburetors as listed.

Qty. 5 p/n 54-816311 Sta-strap.

Qty. 3 p/n 27-67751--1 Carburetor gasket.

Qty. 3 p/n 27-89221--1 Air box gasket.

Four (4) hours labor to diagnose, replace all three carburetors and test.

Warranty labor rate code NJC.

Failure code 703 00.