

NUMBER: 81-7

DATE: 10/5/81

CIRCULATE TO:  
SERVICE MANAGER  
PARTS MANAGER  
MECHANICS

- A. Merc 115 Lean-Fuel Condition
- B. Lifetime Impellers
- C. Thunderbolt Ignition Analyzer Test Manual - Service Aids

## A. MERC 115 LEAN-FUEL CONDITION

Continued factory testing of Merc 115 outboards has revealed an unsatisfactory lean-fuel condition on outboards within the serial number groups listed below. Under demanding boating conditions, this lean-fuel condition could jeopardize durability of the motor because of excessively high piston operating temperatures.

U.S.	Serial No. 5829464 thru 5829653 Serial No. 5855892 thru 5856156 Serial No. 5921454 thru 5923208 Serial No. 6006834 thru 6007658	Australia	Serial No. 8071135 thru 8071289
		Canada	Serial No. 7171253 thru 7171417 Serial No. 7173438 thru 7173502 Serial No. 7179238 thru 7179422 Serial No. 7184338 thru 7184487

To correct this lean-fuel condition, whenever servicing (for any reason) a Merc 115 within the specified Serial Number groups, replace the .072" main fuel jet with a .076" main jet (C-1399-3796) in all three carburetors. This change increases the amount of fuel into the combustion chamber and reduces piston and cylinder head operating temperatures.

Identify carburetors which have the .076" jets by placing 2 punch marks (:) after the carburetor number WMK32 (-1,-2 or -3) on each carburetor bowl. Example WMK32-1:

**C-1399-3796      Main Fuel Jet (.076")**

## B. LIFETIME IMPELLERS

We recently received a brochure published by Lifetime Impeller Facilities of Clearwater, Florida, which was mailed to some of our Mercury Outboard and MerCruiser dealers. It advertises in part ". . . the Lifetime Impeller!!! Lifetime Impeller announces an all new impeller with an unparalleled guarantee up to five times longer life with free replacement should it fail . . .".

These impellers which are a bright orange colored material have been tested by our engineering department. The impellers failed within 1 to 2 hours of operation at 6000 RPM. On the 40 HP thru 70 HP models the vanes broke off the impeller. On the 80 HP thru 225 HP and MerCruiser I, the hub bonding came loose as well as the vanes starting to tear off.

We DO NOT RECOMMEND the use of these impellers in Mercury Outboards or MerCruiser stern drives.

(OVER)

## C. THUNDERBOLT IGNITION ANALYZER TEST MANUAL - Service Aids

The Test Manual (**C-90-62900**) for the Quicksilver Thunderbolt Ignition Analyzer has been updated (revision number **6-880**) to include all current model Mercury and Mariner Outboards and MerCruiser engines, on which the Thunderbolt Analyzer test equipment can be utilized.

If your Test Manual isn't current (check the revision number on the cover) — has pages missing, torn or otherwise illegible — replace it with this latest edition.

Order from:     Mercury Marine  
                  Attn: Publications Dept.  
                  **1939** Pioneer Road  
                  Fond du Lac, WI **54935**

*NOTE: This is the final update of this Test Manual as the Thunderbolt Ignition Analyzer (C-91-62563A1) is now NLA. The Direct Voltage Adaptor (DVA), C-9189045, replaces the Ignition Analyzer test equipment [refer to Outboard Service Bulletin Number 79-10 (6/6/79)].*

**C-91-62900     Test Manual, Ignition Analyzer**